VOL. IX. AUGUST, 1901 No. 2

Georgia Journal OF Medicine and Surgery.

ST. J. B. GRAHAM, M. D.,
W. E. FITCH, M. D.,
EDITORS AND PROPRIETORS.

ISSUED MONTHLY.
SUBSCRIPTION PRICE
$2.00 PER ANNUM

SAVANNAH, GA., U. S. A.

Single Copies 25 cts.

BOSTON MEDICAL LIBRARY MAY 12 1902

The SUPRARENAL CAPSULES in the Treatment of HAY FEVER and DISEASES of the HEART

"The Suprarenal Substance is in my experience a specific for the symptoms of hay fever, and a remedy to rapidly and surely restore the condition of the nasal erectile tissue."

"The Suprarenal Substance is an ideal heart stimulant. No other drug can compare with it for rapidity of action, strength, efficiency and safety combined."

The Suprarenal Substance should be given in 5 to 10-grain doses in capsules which are chewed and swallowed without water.

SAMPLES AND LITERATURE UPON RECEIPT OF PROFESSIONAL CARD

ARMOUR & COMPANY :: CHICAGO

Entered at the Post Office at Savannah as Second Class Matter.

Vitogen

NOT TOO STRONG.

Some antiseptics kill bacteria and also "kill" healthy granulations. Iodoform is frequently guilty of this. But **VITOGEN ANTISEPTIC POWDER** always builds up tissue—never breaks it down—when vitality is low. Vitogen never causes eczema or ulceration. It costs only half as much as Iodoform; goes further and does better work. Always in sprinkle top, screw cap bottles. Sample free to physicians. New booklet on "Anticepticism" now ready.

You cannot appreciate how "perfect" **Saratoga Antiseptic Ointment** is until you have tried it. Sample free to any physician. 1 oz. cans 75c doz.; 60c per lb.

A Powerful Builder—Harvey's Elixir Iron-Mang-Comp. Sample free to physicians.

Mfg. Chemists. **The G. F. Harvey Co.,** Saratoga Springs, N. Y., U. S. A.

Canadian Branch, Mille Roches, Ont., Kezar & Bennett, Agents.

London, England, THOS. CHRISTY & Co., 4, 10, 12 Old Swan Lane, Upper Thames St.

NEW AND EFFICACIOUS.

ERGOAPIOL

SMITH.

ERGO-APIOL

Amenorrhea, Dysmenorrhea, Fetid, Scanty and Retarded Menstruation.

Put up Expressly for the Physician's Use, under whose advice and care they are to be taken.

Apiol—Special M. H. S.,
Ergotin.....
Oil Savin.....
Aloin.....

Introduced and Handled as an Ethical Preparation only.

IN ELASTIC CAPSULES

Put up in capsule form only, packed twenty in a box.

DOSE—One or two capsules, three or four times a day.

Physicians are kindly requested to always order original package when prescribing.

ERGOAPIOL—(SMITH) is lauded a superior preparation because of the Apiol mentioned; a truly active and perfect preparation of Apium Petroselinum, made by a new process peculiarly our own—(not the almost inert complex concentration known to you under this name); the excellent and original composition of the whole; the quality of each ingredient; the great care exercised in its manufacture, and most important

THE THERAPEUTIC RESULTS ACTUALLY OBTAINED.

Physicians are requested to write for samples.

SUPPLIED BY ALL RETAIL DRUGGISTS THROUGHOUT THE UNITED STATES.

MARTIN H. SMITH CO.
Pharmaceutical Chemists.

Physician's price for complete package, one dollar.

68 MURRAY ST., NEW YORK, U. S. A.

LIVE VIGOROUS BLOOD

will save many desperate cases. If your patient is Anaemic, Consumptive, Dyspeptic, he needs good, live, healthy blood for his salvation. But how shall he get it? If the alimentary process has failed to keep up the nourishing and supporting contents of the blood, there is but one thing to do, and ten thousand fold experience has proved that that one thing is this—where nature fails to produce good and sufficient Blood, ***We Can Introduce It*** from the arteries of the sturdy bullock by the medium of

BOVININE

BOVININE is the living blood conserve, and to every properly equipped physician who will test its properties microscopically, physically, or therapeutically, it will speak for itself. Send for our scientific treatise on topical and internal administration and reports of hundreds of cases.

THE BOVININE CO.,
75 West Houston St., New York.
LEEMING MILES & CO., MONTREAL. Sole Agents for the Dominion of Canada.

Cystogen

IN A NEW FORM.

Effervescent Cystogen

Uric Acid Solvent
Genito-Urinary Germicide

is a granular effervescent salt of cystogen. It dissolves immediately upon being dropped into water, effervescing and thereby forming an agreeable carbonated beverage, with the cystogen in solution.

Cystogen is the best solvent of uric acid, and this new preparation, containing five grains of cystogen to the teaspoonful, is destined to make cystogen more and more the favorite of the profession in the treatment of Lithaemia and the Gouty Diathesis.

Cystogen Chemical Co
ST. LOUIS.

WAR DEPARTMENT.

SURGEON GENERAL'S OFFICE.

WASHINGTON, D. C., Jan. 3, 1890.

This is to certify that the exact antiseptic strength of "Tyree's Pulv. Antiseptic Comp." is one part of the powder to fifty of water (1:50). Test tubes containing peptonized beef broth were charged with the powder (Tyree's Antiseptic Powder). The solutions were then inoculated with the anthrax bacillus, and with the staphylococci of pus, and the tubes placed in the incubator for 48 hours at a temperature of 39 deg. C. On removing the tubes from the incubator, it was found that in the solutions of one in ten to one in fifty there was no development of bacteria.

W. M. GRAY, M. D., Microscopist to Army Medical Museum.

DR. GRAY is a very scientific man, and has a wide influence and acquaintanceship as a microscopist, and we believe that this analysis from him is reflected wherever **Tyree's Antiseptic Powder** is known, justifying the busy and country physician, who has neither time, convenience nor inclinatian to use the complicated microscopical process, in depending upon **Tyree's Powder** to accomplish the same results. In all cases of Leucorrheal and Gonorrheal discharges it acts at the minimum amount of risk and the maximum amount of haste, whether of a simple catarrhal non-infectious or of a gonorrheal syphilitic infectious nature. One teaspoonful in a pint of water (cost 2c) makes a guaranteed anti-bacterial solution. It's antiseptic but not irritant. It is scrupulously made and its well-balanced chemical adjustment has established its ethical popularity.

Sod. bor., alumen, ac. carbol., glycerin, the cryst. principles of thyme, eucalyptus, gaultheria, and mentha.

J. S. TYREE, - - CHEMIST, - - WASHINGTON, D. C.

SEASONABLE & REASONABLE

Maltine

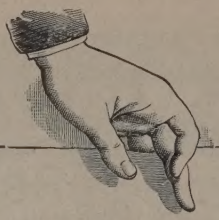
WITH

PHOS-IRON, QUINIA & STRYCHNIA

EACH FLUID OUNCE CONTAINS

Iron Pyrophosphate, 4 grains; Quinia, 1 grain; Strychnia, $\frac{2}{75}$ grain.

In this preparation the powerful tonic effects of Phosphate of Iron, Quinia and Strychnia are aided and reinforced by the highly digestive and nourishing qualities of "Maltine," while the bitter taste of the tonic principles, so often objectionable to weakened stomachs, is almost completely removed. It is of uniform strength and efficiency, prompt in its action, free from the irritation induced by certain forms of iron, and from any of the danger of the cumulative effect of strychnia when administered in the form of pills. "Maltine with Phosphate Iron, Quinia and Strychnia" will be found of great value in such chronic diseases as Scrofula, Dropsy, certain forms of Dyspepsia, Hysteria, etc., and is unsurpassed as a general and nerve tonic in cases of Debility resulting from various causes, and in Malarial Affections.



Like the Building of a House.

WHEN a man builds a house he takes care to first prepare a firm foundation.

When a physician begins the treatment of an **anæmic** or **chlorotic patient,** he must first consider **the "building of the blood," the fountain and foundation of healthy life.**

Pepto-Mangan ("Gude")

Supplies the necessary **oxygen** and **haemo-globin-carrying** elements and thus successfully **builds** from the **foundation upwards** in cases of

ANÆMIA, CHLOROSIS, AMENORRHŒA, CHOREA, DYSMENORRHOEA, BRIGHT'S DISEASE, Etc.

Prescribe PEPTO-MANGAN "GUDE" in original ℥ xi bottles to avoid substitution. IT'S NEVER SOLD IN BULK.

M. J. BREITENBACH COMPANY,

Sole Agents for United States and Canada,

56-58 WARREN ST., NEW YORK.

LABORATORY:
LEIPZIG, GERMANY.

DROPSY.

IMMEDIATE RELIEF FOR, AND PERMANENT CURE BY THE USE OF

ANASARCIN.

The only scientifically prepared pharmaceutical preparation for the treatment and absolute cure of dropsy caused either from heart, kidney or liver trouble. ANASARCIN contains in combination: the active principles of Oxydendrom Arboreum, Urginea Scilla, and Sambucus Canadensis put up in tablet form, convenient for administration. Being the most powerful heart tonic known, it is also indicated in almost all forms of cardiac trouble, especially in valvular insufficiency, irritable or weak heart or threatened heart failure, and tachycardia. Advertised only to the medical profession, and a trial package of ANASARCIN TABLETS sufficient to convince any phyician of its unequaled merit will be mailed free to his address upon application.

THE ANASARCIN CHEMICAL CO.

WINCHESTER, TENN.

HYPOTONE

A TONIC

WINE OF HYPOPHOSPHITES.

A DEFINITE-EXACT-PERMANENT SOLUTION.

THE FIRST DROP EXACTLY LIKE THE LAST.

THE LAST DROP JUST AS GOOD AS THE FIRST.

EVERY DROP BETTER THAN ANY DROP

OF ANY OTHER PREPARATION OF HYPOPHOSPHITES.

AND COSTS LESS BESIDES—
8 oz BOTTLE ONLY 50 CENTS.

THE HYPOTONE COMPANY.
CHAS ROOME PARMELE CO. SELLING AGENTS.
36 PLATT ST. NEW YORK.

IMPERATIVE NEEDS

for the Summer invalid—strength,
nervous force, constitutional vigor—
are always met by the use of

GRAY'S Glycerine TONIC Comp.

It's a potent and pleasant
tasting remedy

THE PURDUE FREDERICK CO.,
No. 15 Murray Street, New York.

NEPHRO-TONE.

A preparation for Chronic Interstitial Nephristis. A most excellent diuretic, which does not irritate. Retained by the most delicate stomachs.

Formula and full information furnished Physicians upon application to

ELDRED SIMKINS & CO., Southern Agents,
SAVANNAH, GA.

NEPHRO-TONE is advertised exclusively to the medical profession and sold only on physician's prescriptions.

H. E. WOOTTON, M. D., Kempner, says:

I am using S. H. KENNEDY'S EXTRACT OF PINUS CANADENSIS and it acts like a charm. It is a splendid mucous astringent.

S. H. KENNEDY'S EXTRACT OF PINUS CANADENSIS.

T. N. CLARK, M. D., Reagan, says:

I have used S. H. KENNEDY'S EXTRACT OF PINUS CANADENSIS in gonorrhea most successfully. I am now treating cases of chronic cervical endometritis with granular ulcerations, and think it particularly indicated there. It was in such practice, I believe, which elicited Sim's encomiums of its merits.

RIO CHEMICAL COMPANY, ST. LOUIS, MO., U. S. A.

GEORGIA JOURNAL
OF
MEDICINE AND SURGERY.

ISSUED MONTHLY.

Vol. IX. SAVANNAH, GEORGIA, AUGUST, 1901. No. 2.

An era is fast approaching, when no writer will be read and appreciated by the great majority, save and except those who can effect that for bales of manuscript, that the hydrostatic screw performs for bales of Cotton by condensing that matter into a period that before occupied a page.—COLTON.

ORIGINAL COMMUNICATIONS.

ACROMEGALIA.*

BY DR. T. L. CORNWELL,
Rock Hill, S. C.

I have chosen the subject of acromegalia for this occasion because it is rare and unique. While we are liable to encounter it any time, many professional men pass through the career of their entire professional lives without having the privilege of treating or of seeing the disease. Therefore, through the kindness of Dr. R. L. Moore, I have secured the consent of this gentleman to present himself here to-night. Mr. Johnson (a patient of Dr. Moore's), whom I now present to you, has the affection known as acromegalia in its most characteristic form; and my object for desiring his presence here is to facilitate our study, promote discussion and investigation, as well as to amplify our knowledge of this hitherto rare and obscure affection. Patho-anatomical research up to the present time has been very meagre indeed, and our text books have little or nothing pertaining to the subject. The history of this case, elicited from Mr. J. himself, and detailed as graphically as his modesty would permit, is as follows :

He was born and reared in this State on a farm; attended the schools of the community with an average degree of progress (and you will remember that the educational facilities were meagre, or rather in a primitive state, in the rural districts forty or fifty years ago). Mr. J. is 51 years old. His family history reveals nothing in common to attract attention or cause comment. He has a son, however, who is beginning to show evidence of the affection at the age of 17. The matilary bone of this young man would attract the

*Read before the Rock Hill (S. C.) Medical Society, May 6, 1901.

attention of any practical and observing medical man. The angles of the jaw are protruded considerably more than normal. Mr. J., the subject of this paper, grew up to manhood a stout, robust fellow, but there was nothing in his physical appearance to attract the attention of his friends till his thirty-fifth year had been reached. Now, if you will notice the ovoid appearance of his face, with the broader end downward, you see a characteristic of the affection. The ears, eye-lids, lips and tongue are particularly broadened and enlarged. These characteristics, together with his hands, which are twice their natural size regarding breadth, as also, you will notice his feet, are still more enlarged. He states that No. 8 shoes were worn up to his thirty-fifth year; and since that time he has gradually increased the size, till now he can wear nothing less than 13's with comfort. He has what he supposes to be rheumatism; also somnolence, headache and some defect in vision. The senses of hearing and smelling are not appreciably affected.

Acromegalia, as defined by Osler, is a "dystrophy characterized by abnormal processes of growth, chiefly of the bones of the face and extremities." The term was introduced by Marie, signifying large extremities. It is also known as Marie's disease.

Etiology: Nothing definite is known of the cause of the disease. Osler, quoting Sousa Leite, states that the disease occurs more frequently in females than males, while other authorities claim that both sexes are alike affected. It is confined to no particular nationality—all being equally affected. The disease has baffled, while inviting curious research. Marie, about the year 1886, made an exhaustive comparative research, and it appears to have been due to he and Erb that we are indebted for the greater part of the facts chronicled in our more recent text books. A few others have written less extensively concerning acromegalia, but we are yet to learn what is to be definitely known concerning this strange affection. Up to the present time the number of cases recorded (since Marie's investigation in '86 of the first two recognized) approximate three hundred. After observing by similarities, Marie was enabled to associate the symptoms complex with a hypertrophy of the pituitary body. Some authorities state that acromegalia is analogous to myxoedema; that the disease acromegalia bears the same relation to the hypophysis as myxoedema does to the thyroid gland. Arnold, of Heidelberg, is accredited with publishing the most exhaustive anatomical study, which was clinically described by Freidreich and Erb. Altogether, there is much confusion concerning the different suppositions of the various authors. In the diagnosis acromegalia must be carefully separated from the osteitis deformans of Paget, in which the shafts of the long bones are chiefly involved; and in the head, the bones of the cranium, but not those of the face. In Paget's disease the face is triangular with base upward; in acromegalia it is ovoid with large end downward, while in myxœdema it is round and full-moon shaped according to Osler. Surgeon General

U. S. A. Sternberg is quoted as saying that all cases of giant growths are of acromegaliac origin ; but Osler admonishes us not to confound acromegalia with the so-called giant growths, the congenital or progressive hyperthrophies of a single number in which the various proportions are maintained.

The age at which acromegalia is supposed to most frequently occur is twenty-five years, though sometimes as late as forty. Infants have been known to contract the disease, and a case above sixty is recorded ; while one eminent authority states that no age is exempt. The pituitary body is regularly found to be diseased ; changes in the secretions of the thyroids, hypertrophy or atrophy, rarely normal, changes in the sympathetic nerves and ganglia. On the other hand, the normal functions of the pituitary body is absolutely unknown. That it has been found hypertrophied, absent, etc., without the symptoms of acromegalia, is likewise proven, and thus an accidental coincidence of its disease in these cases lends only to an hypothesis. Of other ductless glands it has been proven that not one in the body, but has been diseased in some of these cases, and it is probable they are only of secondary importance in accounting for the phenomena of acromegalia. According to the theory of the importance of the pituitary body in the treatment of the disease has gained some adherents and advocates, and not without good reason to substantiate the adoption of the course.

Marinesco reports three cases treated by means of the administration of tablets of the desecrated gland. In two of which, one of each sex, there was amelioration of the headache and distinct lessening in the size of the extremities. He thought it probable that the diseased pituitary gland had undergone diminution of size under the treatment. However, since this appears to offer the most potent means of arresting and probably permanently effecting a cure, it behooves us to give it a more extensive trial ; yet it is unfortunate that the remedy is so difficult to obtain. In consequence of the rheumatoid symptoms invariably complained of, the enlarged bones, etc., alteratives naturally would be suggested to the mind as appropriate treatment ; however, the experience of those who have tried them has been negative. Caffeine and therine seems to overcome temporarily the somnolence. Enalgine and other coal tar derivatives give relief to the pain and opiates while, perhaps, giving better results in that respect, are extremely hazardous in consequence of the permanency of the drug being demanded.

Dr. Johnson suffers greatly with rheumatoid symptoms, and is troubled with somnolence to a considerable extent, but thus far he has taken very little medication. Vertigo is a symptom often complained of, and requires something to combat it.

Mr. J. looks to be a man of unusual physical strength, but his wife states that he does not possess the third of the physical vigor he was won't to exhibit prior to the symptoms of the disease. In reference to the sexual organs, he states that there is no appreciable

change, and that his sexual appetite or propensity for sexual indulgence is rather intensified than otherwise. The latter statement, however, does not coincide with that of his wife's previously quoted. As a rule, persons thus afflicted are very sensitive in regard to their condition, and it is with much difficulty that they can be induced to answer questions without considerable evasion and more or less incorrectness. This paper must necessarily appear cursory and incomplete since so little has been written concerning it.

P. S.—The ears of the subject (Mr. Johnson) above alluded to are becoming ossified.

OTORRHEA—"A RISING IN THE HEAD."*

By DR. WM. LEWIS BULLARD,
Columbus, Ga.

Otorrhea, like "liver disease," takes in a wide range and yet defines nothing definitely. Any discharge from the ear might be termed under the generic name of Otorrhea. Oftentimes we have a discharge from the external auditory canal resulting from various causes, such as boils, foreign bodies, acute diffuse inflammation of the external canal-otitis externa acuta. Syphilis in the secondary stage, when the naso-pharynx is involved, is frequently the source of acute otitis, which, unless appropriate treatment is rendered, is liable to become chronic otorrhea. Adenoid vegetation of the pharyngeal vault, together with hypertrophied tonsils, will aggravate or prolong an already purulent discharge from the ear. Hay fever, whooping-cough and sea bathing will sometimes cause acute otitis, terminating into chronic otorrhea. Coryza and the exanthema are the most common causes, especially measles and scarlet fever, the latter being indeed a most frequent cause. Teething, diphtheria and typhoid fever is said to cause it, and of recent years la grippe has left as its sequele, or marble shaft, so to speak, not a few cases of chronic purulentcy in the ear or ears. The otologist occasionally finds pathisical subjects with an otorrhea, bidding defiance to successful treatment. To be afflicted or diseased with this indescribable stinking (and all cases are offensive and ill-smelling) chronic purulent discharge from the ear is sufficient cause for great mortification and despondency, which always accompany those who are pathologically so afflicted. This reason alone, not mentioning resulting deafness, which always accompanies chronic otorrhea, should demand prompt and scientific treatment. But we have other complications following or accompanying chronic otorrhea. Should the sufferer be that of a child, and the greater number of cases commence during childhood, and just so soon as the mucous membrane become destroyed and necrosis of the membrana tympani and osicula chain become advanced, then the ill-

* Read by title at the Georgia Medical Association, Augusta, Ga. April, 1901.

smelling discharge from the ear is so disagreeable and offensive that the poor innocent child becomes a burden to playmates, teachers and all with whom it comes in contact. This is a deplorable condition and should not be allowed, and when properly attended to in its incipiency will never become chronic. If so allowed, however, then in conjunction with complications already mentioned we may have mastoiditis with its complications, one of which is abscess of the neck from middle ear and mastoid suppuration. I will here introduce a patient, showing a typical case of this kind following a chronic otorrhea.

This patient (male) consulted me three years ago. He had been troubled with otorrhea quite a long time, and when first seen by me he had mastoiditis with abscess of the neck. The pus had broken through the inferior surface of the mastoid process and under the sterno-mastoid muscle and formed a swelling on the side of the neck as large as a medium-size orange. A drainage tube was inserted into the incision made in the neck, curved up and brought out at the mastoid wound, the resulting cicatrix can be seen just above the collar. This patient had lost flesh, pulse rate high and suffering from septicemic poison. He objected to taking chloroform, but willingly took a glass of brandy, and I did a Schwartz operation at my office and he never went to bed, but daily visited my office that I might dress the wound. He made a quick and perfect recovery—the same as if he had been in the sanitarium, surrounded by trained nurses. I have seen numbers of cases of mastoiditis, but none any more remarkable or interesting. We could add still more serious complications resulting from chronic otorrhea, but to mention such would only interest the otologist instead of those for whom this paper is written. Enough, however, is said to show and convince those interested that such sayings as "the child will outgrow it," and the discharge should not be "dried up," is unscientific and dangerous advice. The best treatment for chronic otorrhea is the careful attention, with successful remedies used in the acute stage, and if this stage is managed properly few cases (*only*) of chronic otorrhea will ever be found in the case-book of the otologist. This kind of (appropriate) treatment is the simplest kind. The tendency of acute otorrhea (otitis media acuta) is to get well, and if the external auditory canal is kept dried or wiped out thoroughly of the discharge, which comes from the middle ear through a perforation in the drum membrane, and this is simply drainage, and the best way to do this is with a small wire—a straightened hairpin—the end wrapped with absorbent cotton and the ear mopped out so to speak. Do this every hour if the discharge is very profuse, and as the discharge diminish prolong the time between the drying or mopping. Two or three times daily, *after a thorough drying*, dust lightly some iodomuth or salicylate of quinine in the ear as a disinfectant. *Never* pack any kind of powder into a discharging ear, as I have frequently seen. Numbers of mastoid cases may be traced to packing the ear with

powders, and especially boric acid (it cakes and prevents drainage), and I'll also add that hydrogen dioxide (a prevailing remedy) should never be used in a discharging ear, unless it be the chronic kind, with large perforation in the lower portion of the drum membrane. Should there be adenoid growth or hypertrophied tonsils these should be removed. Any nasal trouble causing a post-nasal catarrh should receive appropriate treatment. Sometimes, however, it will be necessary, though seldom, to syringe the ear (to remove desiccated pus), then a solution of carbolic acid or very weak solution of formaldehyde, using a sterile syringe and boiled water. After syringing, the ear should be thoroughly dried and lightly powdered as above stated. With these simple means and remedies the number of chronic cases of otorrhea, with its serious consequences, will be greatly lessened—comparatively almost blotted from the text-books—except those mastoid cases which sometimes happen before the drum membrane opens spontaneously, and these cases can frequently be prevented by anodynes and incising the drum, if the case has progressed to suppuration.

SUBARACHNOID SPINAL COCAINIZATION AS A MEANS OF INDUCING SURGICAL ANÆSTHESIA.*

By EDWARD N. LIELL, M.D.,
Formerly Lecturer on Gynæcology, New York Polyclinic.
Jacksonville, Fla.,

As chairman of your section on gynæcology and obstetrics, I shall endeavor to merit your approbation and enlist your interest in presenting to you the results of my personal work and also my observations in a field of surgical anæsthesia new to all of us.

A recent advance in surgery is the method of inducing anæsthesia by injection of a solution of cocaine into the subarachnoid space of the lower portion of the spinal canal. By this procedure complete insensibility to pain usually results from the umbilicus, and even from the axilla, to the toes, causing the sharpest steel to lose its sting and robbing pain of victory, while patients retain their full mental faculties.

The innovation is almost revolutionary in technique. It is within a generation that surgery has made a radical and triumphant departure from former methods through asepsis. Here, because of the latter, we have a production which is brilliant! It excites admiration and impresses one; and this because of its apparent simplicity as much as because of the results attained. Operations upon the lower extremities, the genito-urinary tract, the abdominal and pelvic organs, the kidneys and bladder, all seem specially well adapted to this procedure.

* Read at the twenty-eighth annual meeting of the Florida Medical Association, held at Jacksonville, April 10 and 11, 1901.

True anæsthesia is not produced, but complete analgesia only, lasting for a sufficient length of time to admit of the performance of any operation below the regions stated. In this connection, an editorial in the Medical News, October 13th, humorously referred to a vivid imagination conceiving of the analogues of the engravings of the old Vesalian and Albinian anatomies, in which delicate ladies daintily held up the lacework of their own omenta for the inspection of the beholder, in the possible illustrations of the surgeries of the future, which might portray the interested patient as assisting the surgeon by holding a retractor or clamping his own arteries. Yet from personal observation in the numerous instances observed at the New York Polyclinic and the Post-Graduate Hospitals, in October last, as also at the Methodist Episcopal Hospital in Brooklyn, I can assert, and could readily demonstrate, that this humorous picture is but little overdrawn.

The essentials of technique include a thorough asepsis. The needle and syringe should be thoroughly sterilized and the skin over the local area of injection thoroughly cleansed, as also the hands of the operator. To avoid the introduction of any possible infection in the spinal canal by puncturing the skin with the needle, I make a small incision through the skin first with the point of a scalpel, after anæsthetization of the area of puncture by subcutaneous cocainization. I use a gold needle of fine calibre, from three to three and a half inches in length, having a short bevelled point, in order to avoid penetrating the membranes too far. The piston or barrel of the syringe is graduated to thirty minims or more.

Regarding the preparation and sterilization of the cocaine solution, I prefer that of Dr. George R. Fowler, of Brooklyn, using sterilized water and boiling about one minute; to boil it a longer time renders it liable to become inactive and thus unreliable. Yet by whatever manner of means the cocoine solution may be made, failures in anæsthesia will occasionally be met with.

In the introduction of the needle the position to be assumed by the patient is important. Seated on a table, the body should be inclined slightly forward, the distance between the vertebræ being thus somewhat increased, the needle entering more readily.

The point of puncture is one of election as to interspinous space, the second, third or fourth space commending itself, although there seems to be a predilection for the third and fourth. As a guide to the seat of puncture, a point midway between the spinous processes and about one-half inch to the right or left of the median line can be taken; or a horizontal line drawn, connecting the iliac crests, crosses the lower border of the fourth lumbar vertebra. I introduce the needle at a slight angle from below upward and without inward, because of the position of the spinous processes. Gently but firmly pressed in, the escape of the cerebro-spinal fluid, drop by drop, marks its entrance into the subarachnoid space or spinal canal. The finger being placed over the needle opening, the syringe containing

the requisite quantity of cocaine solution is then attached and the contents are slowly injected, about two minutes being taken to complete the injection. I then withdraw the needle and close the point of puncture with cellodion. Anæsthesia, or rather analgesia, is present usually within ten minutes. When complete, it is sufficiently prolonged to accomplish the operator's purpose. If no evidence be present after a wait of fifteen minutes, a second injection can be given. Some patients are readily influenced by small doses, others require considerably more, the hyperæsthetic and nervous person being a type of the latter. Anæsthesia is often absolute, leaving nothing to be desired; yet the fact is equally certain that, despite a thorough technique, there have been many disappointments, either partial anæsthesia or absolute failure necessitating a resort to general anæsthesia. The area of anæsthesia varies considerably, being from the umbilicus down in some cases, while in others it reaches as high as the breasts, and even to the collarbone in rare cases, an instance of which I saw personally.

From our present knowledge, we may glean failures to be the result of:

1. Inert cocaine solution, the result of prolonged boiling or repeated sterilization.
2. Idiosyncrasy to the drug, with which may or may not be associated intensely neurotic temperaments.
3. Faulty technique—too short needle, imperfect syringe, nonentrance of needle or fluid into the spinal canal.
4. Too small a quantity of drug employed.

The disagreeable features of the post-operative symptoms usually associated with this procedure—not necessarily due to the drug, since several of these have appeared when puncture was made and a small quantity of cerebro-spinal fluid withdrawn, and before any injection was given—are:

1. Nausea and vomiting, the latter being rather projectile in character, of short duration usually in the majority of cases.
2. Headache, at times intense, is of frequent occurrence; its severity and duration are variable.
3. Increased temperature in almost every instance, not infrequently as high as 103 degs., disappearing within twenty-four to thirty-six hours.
4. Increase in pulse rate, appearing shortly after anæsthesia is present.
5. Added to these may appear vertigo, pallor, coldness of surface and prostration. Abstinence from food for several hours previous to the injection tends to minimize attacks of vomiting. To counteract any seeming dangers from this method, the preliminary use of strychnine may be made hypodermically, or of whisky by the mouth. For the intense headache, gr. $\frac{1}{150}$ hyoscine hydrobromate has acted favorably, while to lessen post-operative nervous shock gr. $\frac{1}{100}$ nitroglycerin has been given with good result. Symptoms of co-

caine toxicity are thought to be due to spinal shock or to a disturbance of the equilibrium in the spinal canal, as a result of the sudden increase of pressure in the subarachnoid space; to too rapid diffusion toward the brain, or to the quantity of cocaine injected.

When ether and chloroform are objectionable or are contraindicated, as in cardiac disease, nephritis, bronchial and pulmonary conditions, this method of inducing anæsthesia has its legitimate field in exploratory and necessary operations below the diaphragm.

In a paper read by Dr. Goldan before the New York State Medical Association, in October last, which meeting I attended, he gave a history of twenty-seven cases in which the method has been used by him, with two failures, his first two cases. The only absolute failure I personally noted was one at the Post-Graduate Hospital, in the gynæcological clinic of Professor Boldt. Twenty minims of a freshly prepared two-per-cent solution of cocaine hydrochlorate were injected by Dr. Goldan. There being no analgesia after a wait of twenty minutes, a second injection of m xv. was given. At the end of three-quarters of an hour the method was in this case declared an absolute failure, and it became necessary to resort to a general anæsthetic. The technique throughout was perfect, and no cause could be ascribed for such failure.

A rare and instructive case was one in the clinic of Dr. Chetwood, at the New York Polyclinic, it being one for suprapubic cystotomy and perineal section. Twenty minims of a two-per-cent. solution of cocaine were injected by Dr. Goldan between the fourth and fifth lumbar vertebræ, followed in twenty minutes by m x. more, between the third and fourth vertebræ, without any analgesia. Through the interest taken by Dr. Chetwood in the method, with the acquiescence of the patient, the operations were postponed, a second trial being given four days later, this time with complete success after but one injection of m xx. Both operations were performed at one sitting, the anæsthesia lasting fully one and one-half hours. No explanation could be given as to the cause of failure one day and its complete success several days thereafter, the conditions being apparently the same each time.

I desire here to record two cases in which I have made use of subarachnoid cocainization. The first was one which I performed curettage of the uterus, injecting m xx. of a two-per-cent. solution of cocaine hydrochlorate. Anæsthesia was complete in twelve minutes, being of one hour and ten minutes' duration. There was complete absence of discomfort or pain.

Upon the second patient I performed three operations—curettage, trachelorrhaphy and perineorrhaphy—all at one sitting. Anæsthesia was complete in this case also from a m xx. injection of a two-per-cent. solution, and lasted fully one and one-half hours. Vomiting and headache were present in both instances, but not to a decided degree. In each case there was an increase in the pulse rate and temperature, the former rising in the second patient to 116 and

and the temperature to 100.5°, but falling to normal within twenty-four hours.

Dr. Marx, in recording one hundred and twenty-five spinal punctures, labor and operative cases included, states that he had two absolute failures occur in succession, both in intensely neurotic women. By repeated injections, he has carried through a labor case lasting eight hours, with practically no pain. In his opinion, the injection is best indicated in multiparæ when the os is more than half dilated; in primipara, when it is fully dilated.

Prof. Geo. R. Fowler, of the New York Polyclinic, recently recorded his experience with spinal anæsthesia, embracing eighty-one cases, with five failures. He classified them as follows: Twenty-six operations involving the peritoneum, thirty-four operations in the pelvic region not involving the peritoneum, five amputations, thirteen operations upon the lower extremities, three operations unclassified. From the results obtained, he concludes that the extent of the analgesia, as well as its duration, depends in a measure upon the amount of the cerebro-spinal fluid present; that progressive dilution of the cocaine solution, from the point of introduction, lessened the effect of the drug upon the nerve structures with which it came in contact, until finally, if the amount of cerebro-spinal fluid be much larger, the effect was practically nil at points high up in the canal. In a series of twenty-one cases reported by Drs. Hawley and Taussig, of St. Louis, they observed the fact that the duration of anæsthesia was dependent, as a rule, on the quantity of cocaine injected; gr. $\frac{1}{5}$ causing anæsthesia on an average for one hour and twenty-one minutes; gr. $\frac{1}{4}$ for one hour and twenty-six minutes; gr. $\frac{1}{3}$ for one hour and fifty-nine minutes. Cocaine, when pasteurized, gave an average of one hour and fifty minutes' duration, while boiling gave but thirty-five minutes. Dr. J. B. Murphy, of Chicago, at the recent meeting of the Western Surgical Gynæcological Association, stated he had been able to collect 592 cases of subarachnoid cocaine injection, of which number twenty-five were complete failures, and but four partial failures, with one death attributable to the drug, in Tuffier's clinic.

Dr. Robert F. Weir states that, out of 362 cases collected by him, rather alarming symptoms occurred in about one in thirty. Of those who were frank enough to record complete failures, he mentions Fowler, five in eighty-one cases; Goldan, three in thirty one; Marx, two in one hundred and twenty-five; Murphy, one in twenty-five. In this connection I might state that, like ether, chloroform and nitrous oxide, in many instances there were absolutely no immediate sequelæ attending.

The cases recorded by various operators were usually unselected, the ages ranging from two and one-half to sixty-nine years. Renal, cardiac and pulmonary lesions were in many instances disregarded in order to give the method an absolutely fair trial. Yet but one death is recorded. As compared with ether and chloroform, this is by no means a bad record when we stop to consider that the method

is still in its infancy. Face to face with its importance in surgery, gynæcology and obstetrics, it should, however, by no means be approached in anything but a serious manner. The ever-present danger of meningitis, through a faulty aseptic technique, is not to be lightly considered.

From the foregoing, it can be seen that the injection of cocaine into the subarachnoid space in the lumbar portion of the spinal canal, for the production of analgesia and anæsthesia below the point of application, has passed the experimental stage. We are justified in entertaining the hope that this method will have its field of practical usefulness in the near future along with ether, chloroform and nitrous oxide. It not only dispenses with the services of the assistant, but complicating inhalation or aspiration and hypostatic pneumonias are averted.

REPORT OF CASE OF COMPOUND FRACTURE OF LOWER JAW.*

P. R. CORTELYOU, M.D.,
Marietta, Ga.

The patient, Charles Galagher, employed at the Brumby Chair Company, November 7th, 1900, was ordered to change a belt from some shafting, and in attempting to do so, before the machinery had been stopped; while endeavoring to push the belt from the pulley with a chair rocker was caught in the machinery and thrown against a post, striking the right side of the face, thus causing the injury. On examination, I found a transverse fracture of the body of the inferior maxilla on the right side, between the first and second molar teeth. There was marked crepitus, and free movement at the point of fracture, with depression of the anterior portion of the jaw. There was also an external lacerated wound of the muscular tissues extending through the mucous membrane, about three-quarters of an inch long, with some hemorrhage from the gums. A temporary bandage was applied to keep the parts at rest as much as possible during the night, and an anodyne given.

The next day, in consultation with Dr. H. V. Reynolds, it was thought best to have a dental splint made, and of such shape, if possible, to avoid the necessity of extracting any teeth, for the purpose of giving nourishment. Also that the lacerated wound might receive the needed attention without disturbing the dressing. Dr. Duncan Reynolds, a dentist, after several attempts, succeeded in getting a very complete plaster impression of the whole lower jaw. A dental plate was then made to fit over the teeth, with a strong piece of steel wire moulded into the plate on both sides and projecting from the mouth, and then bending back as far as the ears.

* Reported to the Georgia State Medical Association Meeting at Augusta, Ga., April 19, 1901.

The plate was placed in the mouth on the teeth, the fractured ends brought in perfect apposition, and held there by a bandage, passing from the wire on one side under the jaw to the other side, thus pressing the jaw against the dental splint, and keeping it in perfect line and free from all motion.

This also permitted the patient to open his mouth for an inch or more, thus enabling him to take his liquid nourishment without difficulty. The lacerated wound could also be treated without interfering with the splint.

A mouth wash of borolyptol and listerine was ordered to be used freely, and the external wound was dressed antiseptically, as nearly as possible. Liquid nourishment was given as demanded.

After five weeks the splint was removed, and union had taken place and in perfect line.

This form of dressing thus filled perfectly all the needs of the case, and gave patient some movement of jaw, enabling him to use the antiseptic mouth wash, and prevented the necessity for extracting any teeth. It also was as comfortable to the patient as any dressing could be made.

SULPHATE OF QUININE AS AN ECBOLIC.

By O. B. BUSH, M.D.,
Colquitt, Ga.

Quinine, as we know, possesses several different and valuable qualities, among which are those of an antiperiodic, stimulant, tonic, and an ecbolic; this last of which I shall only speak.

It has been asserted by a great many, and among them are some of the most eminent medical men in the world, that quinine possessed no ecbolic qualities, nor did it have any ecbolic effects, but experience has taught me to differ with these learned gentlemen. Some of them acknowledge that sulphate of quinine is a fine stimulant and is of great value in arousing the contractions in complete inertia of the uterus. Now, then, if this is so, as they acknowledge, and as I believe, why then will it not produce abortion or miscarriage? You very quickly see the inconsistency in their position. H. C. Wood and H. A. Hare, of therapeutic fame, say that it acts as a stimulant to the uterine fibres in complete inertia, and yet they say that it has no ecbolic properties. I fail to see the consistency in any such argument. In my experience with sulphate of quinine in pregnant women I have seen two cases—one of abortion and one of miscarriage—in which it had the effect of an ecbolic. I am quite sure that it was the quinine, because I had not given anything that would have had such effect save quinine. Both of these cases were negroes, who are always hard to make abort or miscarry, or at least this has been my experience with them. These two negroes were stout, robust and healthy looking. One of these had a case of facial neuralgia and the other had a spell of remittent fever.

Case 1st.—Negro woman, age 23 years; multipara; had never miscarried or aborted, and was about three and a half months pregnant. Came to my office in the early part of the day suffering with facial neuralgia. I at once put her on 3-grain doses of sulphate of quinine every two or three hours and gave her a purge of cascara sagrada. The negress went away, and about 11 o'clock that night I was called to see her. I found her in labor. She said that she had taken nothing but what I had given her to take. Then, of course, I had nothing else to accuse of the abortion but the quinine. So I am well satisfied that the quinine was the cause of the abortion.

Case 2d.—Another negress, age 20 years; had been in good health; stout; multipara. I was called to see her and found her suffering with remittent fever. She was about seven and a half months pregnant. My treatment was powdered rhei and quinine combined every 3 hours, and Fowler's solution of arsenic every 4 hours. The next day I returned and was compelled to stay with her about eight hours. She was in labor and was delivered of a boy baby, still born, but it was revived and lived two and half days and died. Now, then, if the quinine was not the cause of this miscarriage, what was?

I say, without fear of successful contradiction, that the miscarriage was due to the quinine she had taken.

Rincilia asserts that he saw abortion follow the administration of sulphate of quinine in two bitches, and Walraven asserts that he has frequently seen abortion follow the administration of sulphate of quinine. A record of two cases of such character is given by Burt. One of these cases by Burt, he states positively that he brought on abortion by the use of quinine when every other known remedy had failed. He had a case of typhoid fever in a woman who was three or three and a half months pregnant, and it became necessary to produce abortion in order to save the mother's life. He did not want or care to make surgical interference unless he was forced to do so, so he gave her every known ecbolic without producing abortion, so, as a last resort and, by the way, without much faith in his remedy, he gave her 10-grain doses of sulphate of quinine every hour, and in three hours he had the pleasure of seeing labor set up. Now, then, if sulphate of quinine will produce abortion in one case, why will it not do the same thing in another?

We are all aware of the fact that there are some women that you can hardly produce abortion or miscarriage in by the use of medicine or instruments. Of course, when I say any instruments, I mean any instrumental interference that would be practical or advisable.

Sulphate of quinine only acts as an ecbolic in this way: It acts as a stimulant to the nervous system and in that way increases the muscular contractions of the uterus, and any thing that will increase the contractions of the uterus will certainly cause it to expel its contents.

I think that we all will agree that quinine will act as a stimulant not only to the uterus but to the entire system. Then, if it will do this, why is it that you can not give sufficient doses to make the uterine contraction strong enough to expel its contents? Certainly, in my opinion, you can do this. We will take ergot, if you please. We know that all the use we have for ergot in labor is for its effect upon the uterus; but, if you do not give sufficient doses, you certainly cannot expect any good results from it. But, on the other hand, give it in one or two dram doses and you will very quickly see its effect, and the results are perfectly satisfactory. So it is with sulphate of quinine; you will not get satisfactory results from two or three grain doses, but give it in from ten to twenty grain doses and you can soon see its ecbolic effect, whether you are desirous of seeing these effects or not.

THE AUTOBIOGRAPHY OF A MALARIA GERM.

By THEODORE WATERS.*

There were eight of us in the litter when I was born—eight ill-shapen specks of matter of whom great things were expected, and who expected great things. For, if I may say it, we were quite conscious of one another and of ourselves long before the bursting of the parental egg. We were not able to explain just why, yet we were all fully aware of a previous existence, and the blood brotherhood that existed between us made us strong with the strength of those who have survived great crises together. We regarded the outer world and its pitfalls with some trepidation. Think of us, not too securely encased in a balloon-like bag of transparent skin, floating as the current willed, through a red sea full of monsters—monsters that fought, killed and ate one another.

We used to regard these combats with enjoyment, however, and with little care as to the outcome, for we knew we were safe for the present. But, once we got a fright, which I think, left the birthmark of its terror upon us for all our lives. Our balloon was rolling over and over in the main eddy of a current and we were about to follow hundreds of other balloons through a deep black hole which led to a bigger stream beyond, when suddenly we were stopped with a jerk and then as suddenly allowed to go on. It was dark in that tunnel, and while we were going through it we asked one another what had checked our passage. We had agreed that it was some natural obstruction when we rushed out into the light of the bigger sea. Then we huddled together in horror. Our balloon was in the grasp of a great white monster such as we had often noticed fighting in the current. He was the biggest of his kind we had ever seen. He was not unlike our own protecting balloon in ordinary shape, but, oh, he had a maw—a devouring maw, as big as himself—in fact, it seemed

*In Ainslee's Magazine.

to comprise his whole form. He sent his flagellæ or arms against all portions of our balloon, and gave me the idea of a great stomach having neither mouth nor entrance, yet which could digest equally well with outside as with inside, and which had merely to press hard against a larger object in order to eat a piece out of it. He flattened himself against our balloon, and my brothers on that side came tumbling over in my direction. Out of the blank surface of his side reached his arms, lengthening and shortening and feeling and touching every part of the outside of our little nest. It was terrible. After a while he gathered himself together and let go. He rolled down the current side by side with us until we came to a branch eddy along which he disappeared. We were frightened, I can tell you—some of us nearly to death.

The monster was a phagocyte, or what some people call a white blood cell. There are a great many phagocytes in the human blood, and they are the policemen or scavengers of the circulating system. They go about, fighting and eating up every organism in the blood which they think should not be there. They protect the red blood cells from harm in this manner. My brothers and I lived in a red blood cell which had been occupied by our parent before us. Now, it seems, this phagocyte was out hunting malaria germs, and knowing that our people eat the inside of red blood cells and make their homes in them, he had felt our little domicile all over on the outside to find out whether any of us were within. Luckily, as very often happens, the outer wall of our cell was intact, and the phagocyte was fooled.

There came a time, soon after, when great changes took place in our cell home. It burst one day in common with many thousand of its kind, and some millions of us were thrown out into the red sea to swim for ourselves. I well remember the ecstacy with which we hurried along, each a tiny speck, to be sure, but glad in the knowledge that at least one of us would survive to perpetuate the species. In that we differ from the human species we inhabit. Man thinks mostly of the individual. With us it is the mass. Individuals are nothing. So we plunged on in the current which, with our birth, became violently agitated. One of my neighbors told me that the birth of our brothers in a man was a trying experience for him, and a great triumph for us, as it gave the man chills and brought him down on his back. We enjoyed ourselves immensely as we floated along. When we saw the millions of old red blood cell skins which had contained young malaria germs we made up our minds that every time the man had his chill at least a billion young germs were born in his veins. We laughed, too, over the work the phagocytes would have, cleaning up the discarded blood cell skins which now began to choke the bottom of the streams.

Just then a lot of our new-born brothers began crowding upon us from behind, and when we turned to remonstrate, we saw, away to the rear, a great commotion. A fight and a retreat were going on.

It was slaughter of the most horrible kind. There at the head of a tide of blood were columns of phagocytes cutting into the rearguard of malaria germs, killing them, swallowing them whole, and growing lustier as the process went on. It was an awful spectacle. I hung back, fascinated. A phagocyte would race down the current with a swift overhand stroke, reach out and grasp a microbe from behind. Then the arm of the phagocyte would shorten, and, as it seemed to me, retreat into the white monster's interior, dragging the germ with it. Sometimes a phagocyte would grow facetious, and would bump against poor germ as though shouldering him out of the road. Away would go the poor germ, swimming fast in order to avoid the encounter, but his enemy would then swim faster, striking him fair in the middle, and, with a slow motion going inside out like a glove, and actually taking the germ in with him. Ugh! I should have remained there in a sheer spell if my companion had not pulled me along with him.

"Make for a red blood cell," he called as we went onward.

"What," said I, "a red cell? We have just come from one!"

"Never mind," he replied, "find a red cell and eat your way inside. It is our only chance. See, the others are doing it!"

Sure enough, many of my brethren had selected good red blood cells and were penetrating the skin and climbing inside to escape the phagocytes. It seemed to me so unfortunate, just as we had gained our freedom, but it was better than death. So we looked for cells. Every cell we came to, however, was being occupied, and it seemed to me that the phagocytes were gaining on us when my companion suddenly pulled me to one side and cried:

"Look out! look out! Keep away from that current near the centre there. It is worse than death!"

"What is it?" I cried, for I could see nothing.

"Don't you see?" he said, hugging the wall of the tunnel, "there it is, that discolored streak, running near the centre of the stream. It is caused by what men call quinine, and it is deadly if you swim in it!"

"How does it affect you?" I asked.

"If you swallow it, it numbs you—makes you incapable of motion—stupefies and prevents you climbing into a red blood cell—it is living death, and the friend of the phagocytes!"

I shuddered and swam on. At the end of a sewer-like opening, my friend darted to one side and seized a red blood cell which was unoccupied. He began work on it at once.

"Good-by, brother!" he said. "Here is where I stop. I've work to do. Hope you'll get out of the wet before our white friends catch you. Lookout for the quinine streaks."

I hurried along, hunting for a red blood cell, the more horrified because I now saw countless thousands of my brothers in all stages of intoxication from what they had taken of that terrible drug. Some were struggling in the first stages of its effect; others seemed will-

ing enough to sink under its influence; still others seemed quite stupified. What carnage the phagocytes wrought among the maudlin crowd!

Phagocytes! Horrors! I turned and there was one quite near to me, aiming straight for my flank. I skurried away wildly, and, I think, crying aloud. I turned the first corner I could find, and went headlong down a black passage and out again into another byway where the tunnel was much smaller, but the way was clear of flying squadrons of either germs or phagocytes. I paused, almost exhausted. I noticed a red blood cell without an occupant just ahead of me, but in the immunity of my position I concluded for the moment not to get into it, but to enjoy my freedom a little while longer. I seemed to be in a blind alley so that the cell couldn't get back past me without my noticing it. I felt myself overcome with a species of languor. It seemed so nice to loll there in the current and rest after so much turmoil. What joy, what contentment I felt in this my small corner of the world. Yet after I had reveled in this for a time and grew more languid than ever, I became suddenly filled with terror, for there at the entrance of the passage—the only way out—was a great phagocyte, the one that had pursued me. I tried to make a flying leap for the red blood cell which floated just beyond, but to my extreme horror, I found I could not move. Oh, the agony of that moment, when I realized that I had imbibed some of the quinine streaks, and, oh, the still greater agony of the next, when I recognized the convulsive movement of that white monster as he prepared to throw toward me one of his arms.

Perhaps I have never been nearer to death; certainly I thought my time had come. Then a strange thing happened. The top of the blind alley opened and down through the opening came a great round tube. It was animal-like in its way, but not in the fleshy way of the man in whose veins I lived. It was a horny tube, and a great spike extended down its centre. Immediately it made its appearance I felt a great suction toward its entrance, and I was drawn rapidly into it just as the phagocyte leaped forward and snapped fiercely at me.

I have since heard all about the mosquito, and particularly of the barred-back variety that sucks the malaria germ from human blood and then inoculates other human beings with it; but I did not then know that I was being drawn out of my human host into the body of one of these queer insects. I was too busy taking note of my changed condition, and of my sober senses which returned as the influence of the quinine departed. Indeed, I may say I began to experience modes of life and feeling, particularly of locomotion, which I had never before felt. Among other things I acquired the power of throwing out arms of flagellæ of my own, and I no longer stood in fear of phagocytes. In fact, I rather hoped for an encounter with one of those white fellows. I was able, also, to swim in any direction, instead of depending on the direction of the current.

With an instinct I felt was sure, I struck out the moment I reached the mosquito's great stomach, and cutting my way through the side, I soon reached a small vein in the insect's circulatory system. I found some of my brothers there before me, and many of us proceeded to indulge our old-time trick of investing the blood cells. Of course, the mosquito had malaria just as truly as had the man in whom I was born. He was a very sick mosquito.

But we had hardly got going comfortably in the blood of that insect before something very surprising happened. The light of day which I had never before experienced except in a certain dim way, was let in upon me with a force and a suddenness that was bewildering. As a matter of fact, the mosquito had been killed by a very learned scientific man who extracted some of the blood in this way and placed it on a microscope slide to examine it. I raced forth and back on that slide in an endeavor to get away from that terrible, blinding light, but without avail. I was confined in a glass chambered apartment, and the light came from below. Above the apartment was an enormous black cavern containing a monstrous blue eye, which opened and shut and winked and blinked in the most terror compelling manner.

While I was contemplating this eye with horror, I felt on my side a horrid, clammy, clinging sensation. I knew instantly and instinctively what it was, and I threw out my flagellæ in quick defense. My old enemy, the phagocyte, was trying to eat me. But now I was no longer the helpless little germ of the human blood veins. I was a fighter myself. I battled fiercely, valiantly, not for myself, but for the honor of the race. It was one chance in a million to do combat with an hereditary enemy, and it must not be lost. Not to let him engulf me was my main care, and, besides that, must I inflict as many wounds as possible. I succeeded in bringing half the sphere of his body with my own, so he could not double on me. Then I ravaged him up and down the surface between, ripping open his pearly front in a way that made him wince. I went at him on the principle that he might have been a red blood cell, and started to eat my way into him. I could swallow as much of him as he possibly could of me, but he was not used to be swallowed, while I had an inborn dislike to be swallowed. We churned the waters of that chamber as we wrested around it. Finally with a mighty effort, I bit him through the middle. It was a clincher. He let go of me and started at a swinging pace across the field of the microscope. But I was not to be shaken off so easily. I hung on to him by one arm as a snake might hang on to a dog, and not until I was tired out did I drop off. I was proud enough of the victory—a malaria germ beating off a phagocyte; but I was much exhausted and sank down against a water bubble to rest. I recovered my strength in time, and was about to move away, when there was a sudden, cataclasmic movement of the chamber. It rocked as though struck by an earthquake, the water bubble enveloped me, and then I lost consciousness.

I believe that in his extreme scientific pleasure at witnessing the fight, which proved the mosquito inoculation theory of malaria, the very learned man had fumbled his glass slide and broken it. The pieces were thrown into a sink, and the liquid contents must have run off to a sewer, for when I came to myself I was floating down a small country stream, the very type of water-borne malaria. I found many brothers *en voyage,* although none had come from a laboratory. Some had lived entirely in mosquitoes which had died on the road and dried up, allowing the germs to be blown through the air, to be breathed in by human beings and animals. One brother had lived in an army officer in the Philippines, and had made him so ill that he had to be sent home, whereupon a mosquito had bitten the man and sucked my brother out of him. After a time, that mosquito died in giving birth to wrigglers, whereupon my brother became water-borne. Another brother had lived in a bat, and he told some thrilling stories of fights with other germ armies. There was a statistical fellow, too, who claimed that our people did more harm in the world than the consumption spores. *They* control only individual persons, but *we* lay low whole armies of them, and actually prevent them living on many thousand square miles of the earth's surface. I had great respect for our race after that.

While we were going down that river I encountered a side eddy, and when I followed it, found myself going into a tube that reminded me of the mosquito's proboscis. This tube was cavernous, and the way was long. One of my brothers who had traveled that way before shouted for us to follow him. We went along a black tunnel and down a deep pit, and at last found ourselves in a great chamber, the sides of which heaved horribly and churned up a great variety of substances that lay on the floor. The place soon filled with water, and we floated against the roof.

"Attack the walls," cried our brother; "there is blood beyond."

We did so and soon found ourselves in tunnels of blood, following a similar action, but different in many ways from those of the man or the mosquito. Strangely enough, these passages were filled with black, wormlike germs that stopped to look at us when we came in.

"Hello! what family do you belong to?" they cried.

"We are Malaria. Who are you and what is this place?" we called back.

"We are Filaria!" they replied. "We are the fellows the Chinese dread. We cause elephantiasis, only, being short of Chinamen just now we are at work on an old crow. Didn't you notice the enormous size of his legs; they are nearly as big as his body. He is pretty sick and now you will make him sicker. Is it a truce between us? Yes? Well, come along, altogether, brothers."

But I never was quite contented to live in that crow. He was not a very good crow, anyway—he hadn't good blood. It had been so impoverished by our snake-like friends that I could not abide it. There was hardly a healthy red blood cell left, nor yet a phagocyte

to fight or to run from. I was afraid he would die, too, and I longed for the blood of my birth, the good, red, thick blood of a healthy man. So I hunted for a blind alley. Experience had taught me that in one of these I was most likely to be sucked up by a mosquito. Well, I was picked up finally, and I enjoyed that mosquito more than the other, for I lived longer in him. One night I felt myself suddenly projected down the dark passage of his proboscis, and almost before I knew it I was swimming in the blood passages of a man. I was the only malaria germ in him, but that made little difference to me, for I knew that in a few days there would be millions of me. I had little trouble with phagocytes, for they, having almost nothing to do, were like all good policemen, asleep in the spleen, which is their station-house. So I leisurely selected the biggest, fattest, thickest-skinned, red blood cell I could find and climbed inside. That is where I am now, oh, children of the countless generations to come. I am about to divide in halves, then in quarters, then in eighths, and so on until there is no more room for division, and each part in the fullness of time will become a full-fledged germ and will produce as many more germs as were born with him, and so on unto the billionth generation. For so is it written in the book of science.

AN UNUSUAL, AND PROBABLY UNIQUE, COMPLICATION (GENERAL EMPHYSEMA) OF TRACHEOTOMY.

By E. C. ELLETT, M.D.,
Memphis, Tenn.,
Ophthalmic and Aural Surgeon to St. Joseph's Hospital, the Children's Home, the Lucy Brinkley Hospital, and the City Hospital.

The following case was observed about three years ago, and at that time and on several subsequent occasions I have attempted to find some record of a similar result following the operation of tracheotomy. Besides a careful search of what literature I had in my own possession or could gain access to, I went carefully through the catalogue of the library of the Surgeon-General's office and had sent to me some fifteen or twenty volumes containing matter which might bear on the subject. In addition to this I have mentioned the case to others of some experience in this work, but I have been unable to learn of any other case in which the condition appeared to anything like the extent it did in mine.

The following are the notes of the case:

The patient was a boy two years old, whom I saw through the kindness of Dr. Rudisill on July 27, 1898. Four days before, while eating a watermelon, he was seized with an attack of coughing, quite croupy in character, which had continued ever since, the child presenting no other symptoms. Auscultation over the trachea elicited a sound which might have been produced by the flapping of a light foreign body. Expectant treatment not being agreeable to the

family, tracheotomy (the low operation) was done next day under chloroform. Aside from the embarrassment occasioned by a short, fat neck, the operation was an ordinary tracheotomy. Exploration of the trachea down to the bifurcation and up to the larynx did not detect any foreign substance, but induced a fit of coughing by which a watermelon seed was expelled from the wound. The wound was then cleansed and closed with three layers of catgut sutures, one in the trachea, one in the muscles and one in the skin and fascia, and the dressings applied. Following recovery from the anesthetic, the child began to cry, forcing air out of the tracheal wound, and thence along the layers of cervical fascia, since close apposition of the skin wound prevented its escape to the surface. The child swelled to an alarming degree, the emphysema being at first confined to the left side of the body and the right side of the head, but soon involved the subcutaneous tissue of neck, face, scalp, chest, abdomen and scrotum. The legs were not affected and only one arm (left) slightly. In a crying spell the child would double his size, and on quieting the swelling would greatly subside, but not disappear. In some places the skin was raised nearly two inches from the underlying parts. The next day the condition was less marked, and after six days was about gone. The wound healed by first intention, and the child was at play three days after the operation. The appearance was one which, to a person unacquainted with the cause, was truly alarming. At its appearance the parents of the child sent in haste for Dr. Rudisill, who recognized the condition at once and soon quieted their fears.

The case was reported to the Memphis Medical Society in August, 1898, and in the discussion Dr. Sale mentioned a case similar in many respects upon which he had operated some years before. Emphysema of the chest and neck developed without any ill effect.

Randolph Building.

Read the advertising pages of the Georgia Journal of Medicine and Surgery. Therein are announced the medicinal preparations of known constituents and established value, recent products of chemical and pharmaceutical progress; latest instruments and apparatus of reliable manufacturers; new books of leading publishers; the prospectuses of reputable schools, colleges, sanitariums, resorts, etc.; practices for sale, etc. We maintain the highest standard of reliability in our advertising pages. Like our text pages they represent much thought and research, and they afford information of great practical value to the alert reader.

Georgia Journal of Medicine and Surgery.

Georgia Journal of Medicine and Surgery.

EDITED BY

St. J. B. GRAHAM, M. D. W. E. FITCH, M. D.

SUBSCRIPTION RATES.

TERMS:—$2.00 per Year, in Advance, in United States, Canada and Mexico.

PRICE TO FOREIGN SUBSCRIBERS.

PER YEAR (*postage included*).....$2.50

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

All editorial communications should be addressed to THE GEORGIA JOURNAL OF MEDICINE AND SURGERY, 24 E. Liberty Street, Savannah, Ga.

Articles for the original department of the GEORGIA JOURNAL OF MEDICINE AND SURGERY will be accepted only with the understanding that they are not to be reprinted, excepting by us, or to appear in any other publication, excepting the transactions of the Society before which the paper may have been read

Authors will receive reprints of their articles provided they request same when sending in their MSS., and will be charged as per scale of charges on page VIII.

Authors may have 25 copies of the JOURNAL, containing their articles, mailed to their friends by furnishing us with their addresses, on so requesting, without cost or trouble to themselves.

All matters of a business nature, as well as subscriptions, manuscripts, exchanges and books for review should be addressed to the Editorial Office, 24 E. Liberty St., Savannah, Ga.

HALF-TONE ENGRAVINGS to illustrate accepted articles will be made free of charge, if proper drawings or negatives accompany the manuscript. Electrotypes of such cuts furnished at cost.

PHYSICIANS' WANTS, ETC.—A department will be devoted to the free publication of subscribers' wants, practices for sale, change of location, etc.

SECRETARIES OF MEDICAL SOCIETIES will do us a favor by keeping us informed of dates of meetings of same. etc

ACROMEGALIA.

Acromegaly, or pachyacria, is a disease associated with increase in thickness and length in the long bones, with more or less alteration in many of the smaller bones. That the flat bones are similarly affected is shown by the increase in size of the facial sinuses. The lower jaw increases in length and thickness (prognathous jaw) and may be projected so far forward as no longer to articulate with the superior maxilla. The osseous overgrowth is usually symmetric. The spine suffers a varying degree of dorsal kyphosis. In many cases the pelvic bones and the sternum are thickened; the clavicales may be thickened and sometimes slightly elongated. The antero-posterior diameter of the chest is increased as a result of the lengthening of the ribs and posterior curvature of the spine. The slight bulging backward of the spine and projection of the sternum forward, with the drooping head and prognathism, constitute the ape-like deformity of this disease. The bones of the hand are enlarged and slightly lengthened, giving rise to the battledore hand presumed to be quite characteristic of acromegaly. In acromegaly the hypophysis cerebri usually shows some abnormality; it is sometimes the seat of a tumor, while in other cases the enlargement seems to be rather proliferative in character. The constancy with which changes are found in the hypophysis would naturally lead to the belief that this organ is the seat of the primary lesion, but similar, if not identical,

changes have been found in the pituitary body without the osseous phenomena of acromegaly.

SOME OBJECTIONABLE HEAD-LINES.

Nothing is perfect, no one is infallible. This statement may be devoid of both originality and startling interest, but its truth can be neither gainsaid nor denied. It should not, however, discourage efforts toward perfection or infallibility, and so with a laudable desire to render modern journalism more acceptable to the medical profession and freer from what sometimes seem intentional inaccuracies, we enter a protest against certain objectionable head-lines. The first offender is "The Doctors Disagree," printed in the blackest, boldest type.

Now, traces of this same head-line have been found in the earliest times; ancient Hebrew and Egyptian histories are replete with it. There is scarcely an instance mentioned in which a cure was effected, that some disagreement of doctors was not recorded. In fact the chronicler seems to have taken a peculiar delight in noting this fact, so circumstantial evidence would point him out as the direct ancestor of our friend, the modern journalist. Then the immortal Shakespeare passes it along, for "Who shall decide when doctors disagree?"

But we shall go no deeper into the genealogy of this offender; we have shown it to be most ancient. We do not wish to be iconoclastic, but isn't it time to crush this objectionable idol? Why should not doctors disagree if they care to? Surely this same right is conceded to other mortals and no comment made. Did any one ever hear of lawyers who agreed, of chemists whose views were identical, of members of any art or profession who held exactly the same opinions?

The mere fact that attention is called to the disagreement of doctors, shows it must be exceptional with them, for it is the exception not the rule that is recorded. A railroad accident is a fit subject for newspaper extras, yet no mention is ever made of the thousands of people daily transported without a mishap.

When medical and surgical cases become so plain, so readily diagnosticated, that the proverbial wayfaring man may read, when even the newspaper journalist himself may at a glance discern the true pathology, then the opinions of medical men will be as a unit. But until this happy time comes, let us hope there will still be doctors whose peculiar training and originality of thought point out features in the case that lead to different conclusions—doctors, in fact, who disagree.

Our second culprit is, "The Doctors Were Puzzled." Judging from its frequency, this must be a most popular head-line. When any medical or surgical case gets in the newspapers, the account

never seems sufficiently well rounded to the reporters nor gives satisfaction to the public unless accompanied by the statement that the doctors were puzzled. And, as pointed out by the Medical Record, after making this positive assertion, the article usually concludes with a very clear and logical explanation of the case by the physician in charge! We have all read, for instance, the newspaper accounts of some dime museum freak, as the "ossified man," the description of whom is usually preceded by an obtrusive announcement of bewilderment of the doctors concerning the true nature of the unfortunate's affliction, but the account winds up with the only doctors mentioned in connection with the case giving a very logical and positive opinion that the disease resulted from a multiple arthritis, caused by rheumatic or septic conditions.

In the "gude time" a-coming when the hard-working physician will receive his just compensation, when the laity will appreciate the *raison d'être* of medical ethics, when the mist of superstition and prejudice shall have been completely dissipated, let us hope there will be no puzzling there and startling head-lines will no longer announce that "Doctors Disagree."

EDITORS' TABLE.

The 13th annual meeting of the Tri-State Medical Society, Alabama, Georgia and Tennessee, will be held at the Tulane, Nashville. Tuesday, Wednesday and Thursday, 8th, 9th and 10th October, 1901, The attendance promises to be large and an unusually attractive program will be presented. The railroads will give reduced rates. Those intending to read papers should send titles to the Secretary, Dr. Frank Trester Smith, Chattanooga.

* *

University College of Medicine.—In endeavoring to raise the standard of medical education, this institution has always maintained an optional four-year course, even before the establishment two years ago of the cumpulsory four-year system.

The first regular four-year class which will graduate the coming session will necessarily be small, and will offer unusual opportunities to the student for personal clinical work.

* *

New Orleans Polyclinic.—Fifteenth annual session opens November 4, 1901. Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery. The specialties are fully taught, including laboratory work. For further information address Dr. Isadore Dyer Secretary, New Orleans Polyclinic, P. O. box 797, New Orleans, La

Double Consciousness.—The Buffalo correspondent of the New York Medical Journal of June 15, 1901, reports a singular case of double consciousness. The man arrived in Buffalo on the evening of May 24, and two days later went to a clergyman after evening service and stated that he had forgotten who he was and where he came from. The superintendent of police and a police surgeon were summoned. In answer to questions of the latter the young man was unable to say what his name was, where he lived, whether he was married, or, indeed, anything at all. He seemed to remember most of what had occurred to him subsequent to his arrival in Buffalo. He was taken to the police station, where he made no objection to being searched, but no trace of his identity was found. The address of a married woman was found in his pocket, but he denied any knowledge of who she was. Drs. Krauss, Crego and Putnam were summoned to see the patient, and they hypnotized him. While in the hypnotic state he readily answered questions as to his identity and informed the physicians that he came from Providence, was 25 years of age, married, and the representative of an insurance company. He did not know that he was in Buffalo, and was uncertain as to how he got there. On being restored to full consciousness he remembered having decided to come to the exposition, but everything that had transpired subsequently appeared now to be a blank. The woman whose address was found upon him proved to be his sister, who was able to definitely fix his identity.

* *

Collective Investigation of the Influence of the Silver Nitrate Injections on Phthisis.—To the Members of the Medical Profession: In 1892 the undersigned began a collective investigation of the action of cold in the treatment of acute pneumonia, und there is reason for believing that this procedure which resulted in gathering four hundred cases of this disease thus treated, with a death rate not quite five per cent., was an important factor in calling attention to the utility of that treatment, and in introducing it to the profession of this country. That research was based on the conviction that no remedy can be called truly successful until it has passed the exacting crucible of clinical experience, and it is now proposed to apply the same ordeal to the silver-injection treatment of phthisis, which, in a large hospital, dispensary and private practice, reaching over a period of three years, and during which many thousand injections were administered, has given me greater satisfaction than any other method that I have ever employed. In keeping with the above expressed feeling a cordial invitation is herewith extended to those members of the profession who have the inclination and opportunity to investigate this method of treating phthisis and to whom a reprint on the subject with full information and blanks to report cases will be cheerfully sent on application.

Thomas J. Mays, M.D.,
1829 Spruce St., Phila., Pa.

August 15, 1901.

God and the Doctor.—Some time ago, a correspondent asked for the author of the following lines:

"God and the Doctor we alike adore
When on the brink of danger, not before;
The danger past, both are alike requited:
God is forgotten, and the Doctor slighted."

The same question has been asked of the editor of the British Medical Journal, who replies as follows (June 6, 1901):

The lines are quoted in Styrap's Code of Medical Ethics (London, 1890, p. 75), but the author's name is not mentioned. They have a generic resemblance to the Latin quatrain said to have been written by a mediæval physician, whose name escapes us:

"Tres medicus facies habet; unam quando rogatur,
Angelicam; mox est, cum juvat, ipse Deus;
Post, ubi, curato poscit sua præmia morbo,
Horridus apparet, terribilinque Sathan!"

The following translation of this epigram is taken from Timothie Kendall's Flowers of Epigrams (1577):

"Three faces the Phisition hath.
First as an Angell he,
When he is sought; next when he helpes,
A god he seemes to be;
And last of all, when he hath made
The sicke, deseased well,
And asks his guerdon, then he seemes
An oughly Fiend of Hell."

It has been cynically suggested that the gratitude of the patient is a part of his disease. It comes on with the fever, improves during convalescence, and disappears on the return of health.

* *

For Sale—Tickets for Post-Graduate Instruction.—The Journal has for sale tickets for instruction at one of the best post-graduate schools in New York. Physicians contemplating taking post-graduate study will do well to correspond with us. We will save you money. *Write us.*

* *

Read the advertising pages of the Georgia Journal of Medicine and Surgery. Therein are announced the medicinal preparations of known constituents and established value, recent products of chemical and pharmaceutical progress; latest instruments and apparatus of reliable manufacturers; new books of leading publishers; the prospectuses of reputable schools, colleges, sanitariums, resorts, etc; practices for sale, etc. We maintain the highest standard of reliability in our advertising pages. Like our text pages they represent much thought and research, and they afford information of great practical value to the alert reader.

Georgia Journal of Medicine and Surgery.

NEW BOOKS.

FROM P. BLAKISTON'S SON & CO.

Potter—A Handbook of Materia Medica, Pharmacy and Therapeutics.—Eighth Edition, including the Action of Medicines, Special Therapeutics of Disease, Official and Practical Pharmacy, and Minute Directions for Prescription Writing, etc. Including over 600 Prescriptions and Formulæ. By Samuel O. L. Potter, M.A., M.D., M.R.C.P. (London), Professor of the Principles and Practice of Medicine and Clinical Medicine in the College of Physicians and Surgeons, San Francisco; Brigade Surgeon U. S. Vol. Eighth Edition, Revised and Enlarged. 8vo. With Thumb Index in each copy. Cloth, $5.00; Leather, $6.00; Half Russia, $7.00. P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia.

The author's aim in preparing this work was to embrace in a single volume the essentials of practical materia medica and therapeutics, treating each subject in a concise phraseology as possible consistent with the lucid delineation of every important feature. The author also formulates such minute and definite directions for the framing of prescriptions, thereby elucidating what to many is a very difficult problem.

All books of this class are essentially a compilation, yet there is to be found in the pages of this volume much original matter derived from the author's experience in professional life.

In detailing the characteristics of an important drug, its physical properties and chemical constituents are first briefly enumerated, then its preparations are described in the official language of the Pharmacopea, usually somewhat abbreviated. Any important unofficial preparations are also noted, and all the compounds into which it enters are also mentioned. Following this the physiological action is next described. These are followed by a brief account of its antagonistics, antidotes and incompatibilities, if any, and a concise summary of its therapeutic application closes the article.

The second part of the book is devoted to pharmacy, and prescription writing receives full consideration, and many standard formulæ are given as samples of prescription of each kind for extemporaneous use.

The third part of the work is devoted to special therapeutics, treated elaborately in an alphabetically arranged *index* to the treatment of diseases; every indication for the use of a drug is referred to its author, and to the most prominent articles are appended a few selected formulæ to serve as guides to the young physician in prescribing. The appendix contains numerous tables, comprising diagnostic hints, Latin terms and phrases, formulæ for hypodermic use, metric equivalents; also formulæ of the most noted patent medicines. The index is the work of an artist, and, as has been said, "when well made is the best part of a good book" is true in this instance.

Every title, synonym and other reference of importance is included; double and treble entries are made in many instances.

In revising the seventh edition the author has given the text a thorough, painstaking overhauling. The greater portion of the old book has been entirely rewritten and expanded by the introduction of new matters. In the section on materia medica twelve articles have been rewritten. In the section on therapeutics new articles are added on *Local Anesthesia, Beriberi, Dhobis Itch, Tropical Fever, Heartstroke, Hemoglobinuric Fever, Lymphadenoma, Malaria, Bubonic Plague, Sprue Tenia Imbricata, Tenia Vesicolor and Toxæmia.* Twenty-eight articles in this portion of the book have been rewritten.

The author has very skilfully steered his course between the pessimism that marks a system of therapeutics based solely on the results given by experiments and observations in the chemical and physiological laboratories, and the optimism of hasty empirical generalizations upon meagre clinical data, and upon this we consider that the greatest claim can be made, that this book is a safe one for the junior practitioner.

The author's statements are concise, exact, compact, and his diction faultless; no one, perhaps, in this country at least, excels him in the perspicuity of his condensations and the completeness of his work in respect to the many details involved in authorship.

FROM J. B. LIPPINCOTT CO.

International Clinics.—A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pædiatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other topics of interest to Students and Practitioners. By Leading Members of the Profession Throughout the World. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U. S. A.; with the Collaboration of John B. Murphy, M.D., of Chicago; Alexander D. Blackader, M.D., of Montreal; T. M. Kotch, M.D., of Boston; E. Landolt, M.D., of Paris; Thomas G. Morton, M.D., Charles H. Reed, M.D., and H. C. Wood, of Philadelphia; with Regular Correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume I. 11th Series. 1901. Price, per volume: Cloth, $2.00; Half Leather, $2.25. Philadelphia: J. B. Lippincott Company.

It affords the reviewer unusual pleasure to see volume II, Eleventh Series of *International Clinics* laid on our table. After eleven years of meritorious success it enters upon the new century with all promises fulfilled. The eleventh series surpass all former efforts of the publishers and editors in being the most practical, most economical and best illustrated work of its class ever offered the profession. Want of space forbids mention of the interesting and valuable papers ound in this volume.

Among the list of contributors we note Drs. John B. Deaver, William T. Shoemaker, James Tyson, of Philadelphia, and others.

This quarterly makes unquestionably one of the most complete and most reliable reviews of the advances in scientific medical literature with special reference to its practical applications that has yet been published. The editor has selected the very best contributors—men who know their business in their different departments and who do it well and thoroughly. They are men of experience, reputation, and whose opinions are respected.

No one can but be interested with the character of this work. Everything is said in good, easy style, and is something new. No superfluous material is given—only that which is concentrated and can be used with benefit. We congratulate the editor, the contributors and publishers upon the most excellent manner in which they have issued International Clinics.

FROM LEA BROTHERS & CO.

Medical Diseases of Infancy and Childhood—By Dawson Williams, M.D., Physician to the East London Hospital for Children. New (2d) edition. Specially revised for America by F. S. Churchill, A.B., M.D., Instructor in Diseases of Children, Rush Medical College. In one 8vo. volume of 538 pages, with 52 illustrations and two colored plates. Cloth, $3.50, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

The first English edition of this work was recognized at once as being a valuable contribution to our literature on this important subject. The second edition, which has been Americanized by Dr. Churchill, should be even more valuable than the first. An examination of the work shows great care and thoroughness on the part of the writer and editor, and its teachings are at once sound and practical. Numerous prescriptions are scattered throughout the text and then gathered together in an appendix at the end for convenient reference.

Particular attention is given to infant feeding, both on account of its importance and because in this respect the original edition seems to depart most from American ideas and standards.

This new edition conforms to the U. S. Pharmacopeia and is well adapted to the needs of the student as well as the active practitioner. A number of illustrations have been introduced to explain or simplify the text.

The mechanical finish and get-up of the book are in keeping with the worth and merit of its contents.

FROM HEATH CULTURE CO.

The Attainment of Womanly Beauty of Form and Features, the Cultivation of Personal Beauty Based on Hygiene and Heath Culture, by 26 Physicians and Specialists. Edited by Albert Turner, Publisher of "Heath Culture," New York City. Third

edition. Cloth binding, 256 pages. Heath Culture Co., 481 Fifth Ave., N. Y.

It is every woman's duty to do all in her power to preserve her good looks and be as attractive as possible. Physical beauty means more than mere personal gratification; it often means success in life's work.

The editor, recognizing the great importance of presenting and preserving a good personal appearance has prepared this manual by receiving contributions from acknowledged experts on the preservation of health and the cultivation of beauty of form and features, keeping in mind at all times that health and beauty go hand in hand. To those who would become more beautiful we commend this book. It tells you how to be beautiful; how to eat, sleep, breathe, walk, laugh, etc. It is a book that ought to be read by every daughter in the land, and a volume we have received much information from.

FROM SPON & CHAMBERLIN.

Inductive Coils—How to Make, Use and Repair Them—Including Ruhmkorff, Tesla, and Medical Coils, Roentgen Radiography, Wireless Telegraphy, and Practical Information on Primary and Secondary Battery—By H. S. Norris (Norman H. Schneider). Second edition, revised and much enlarged. New York: Spon & Chamberlin, 12 Cortlandt St. London: E. & F. P. Spon, Ltd., 125 Strand. Price, $1.00.

Considerable space in the new matter is given to the following: Medical and bath coils, gas engine and spark coils, contact breakers, primary and secondary batteries, electric gas lighting, new method of X-ray work, etc. A complete chapter on up-to-date wireless telegraphy, a number of new tables, and twenty-five original illustrations. Great care has been given to the revision to make this book the best American work on the subject. A very complete index, contents, list of illustrations and contents of tables have been added.

FROM THE G. & C. MERRIAM CO.

Webster's International Dictionary of the English Language, being the authentic edition of Webster's Unabridged Dictionary. Thoroughly revised and enlarged under the supervision of Noah Porter, D.D., LL.D. New plates throughout. 25,000 new words and phrases prepared under the direct supervision of W. T. Harris, Ph.D., LL.D. Rich bindings. 5,000 illustrations. 2364 pages. Price $12 00. G. & C. Merriam Co., Springfield, Mass.

The latest and largest, the most accurate and the best illustrated, is the TRUE Webster's Unabridged Dictionary for 1890. It costs enough to be valuable, but is worth all it costs. The latest and true Webster is no reprint of obsolete material on defective plates. It bears the same relation to cheap reprints that the palace vestibuled passenger train and equipment of the present day bears to the creaking, rattling cabooses and strap rails of forty years ago.

PROGRESS
—OF—
MEDICAL SCIENCE.

THERAPEUTICS

UNDER THE MANAGEMENT OF
MARION X. CORBIN, M. D..
SAVANNAH, GA

SUGAR-FREE MILK AS A FOOD FOR DIABETICS.—Robert Hutchison, in the Lancet of June 22, 1901, says a difficulty in practice is in providing patient suffering from diabetes with a diet free from carbohydrates and which can be taken for a long time. The nutritive constituents must consist largely of proteid and fat, but when carbohydrates are taken out of the diet it is difficult to replace them by sufficient fat. Fat in the form of bacon is palatable, and more or less fat can be added to meat and fish. Butter is difficult to administer, except when taken, as is commonly the case, with carbohydrates. This difficulty in the ingestion of fats is met by separating the sugar from milk, thus furnishing a food rich in proteid and fat, but without a carbohydrate. Mr. Morris, chief dispenser to the London Hospitals, has prepared a very perfect milk in which sugar has been removed, which resembles a rich specimen of ordinary milk. It can be administered plain, or with some effervescing water, or added to tea, coffee, or cocoa. With eggs it can be made into a custard, thus adding a palatable and agreeable food to the limited range permitted the diabetic. Sugar-free milk contains approximately 3 per cent. of proteid and 5 per cent. of fat. If three pints are taken in a day, the food value amounts to 990 calories, or nearly one-third of the total amount required, while the amount of fat which the patient obtains is equivalent to fully three ounces of butter. In cases in which a small amount of carbohydrate is desirable, it is sometimes best to substitute sugar-free milk, and give carbohydrates in the form of potatoes or bread, as this enables the patient to ingest a larger amount of fat.—*Medicine.*

A SIMPLE ELECTRIC LIGHT AND HEAT BATH.—F. C. Eve, in The Lancet of May 18, 1901, describes an apparatus which consists of three thirty-two-candlepower electric lamps mounted on an aluminum base and protected by a wire cage from contact with the skin of the patient or the blankets forming the walls of the chamber. A flexible wire connects the apparatus with a socket of the electric light supply of the house. The apparatus may be used to heat a single limb or the whole body. The limb, the apparatus, and the

thermometer are all placed together in a chamber formed of several blankets thrown over an improvised cradle. The limb is covered with a single layer of lint to prevent scorching a tender skin. The temperature of the chamber rises in from fifteen to thirty minutes to from 200° to 250° F. The limb sweats copiously and a general perspiration is induced. As a rule the body temperature rises two or three degrees, especially when the whole body is treated. Frequently the part has a mottled erythema, which is transitory. Even in the most obstinate cases pain subsides at the end of an hour, and generally it does not recur for several days. Practically it is claimed that from this small apparatus as much benefit is derived as from the more elaborate contrivances now in use. He has employed this form in eight cases of rheumatoid arthritis, in all of which pain was severe and deformity marked. The ages ranged between six and sixty years. In some of the cases a point was reached in the amelioration of the disease after which no further improvement was obtained. A history of these cases is given, and it is stated that the cases were in no sense selected.—*Medicine.*

Toxicity of Acetanilid.—S. E. Earps, in Merck's Archives for June, 1901, says that acetanilid has toxic properties which are often exhibited when the drug is given in small doses, but not with sufficient severity to require treatment. In other cases symptoms become so severe that a fatal result may be imminent, unless prompt treatment is employed. Unfortunately this drug has been widely advertised as a universal analgesic, and a large number of remedies for the relief of pain, under catchy titles, contain this drug as an essential ingredient. Fifteen grains is commonly considered the maximum dose, yet he has seen one-third of this quantity produce alarming symptoms. Authors have occasionally advised that three grains be given each hour, but he has seen patients reach the danger line long before the maximum quantity was given in this way.

He cites the case of a patient who had taken four headache powders. He was hastily summoned with the statement that the woman was turning dark. The headache powder had been taken each hour, beginning at nine o'clock and ending at noon. The surface of the body presented an ashen-gray appearance, the mucous membranes having a much darker hue. The temperature was 96°, pulse 60 and respiration 10. Digitalis, strychnine, and alcohol baths with friction were employed, with dry heat to the surface. When the patient was able to swallow, a combination of aromatic spirits of ammonia, brandy and capsicum was given. Twenty-four hours later the temperature was slightly subnormal, the dusky appearance of the face disappeared to a large extent, but the symptoms of cyanosis did not wholly vanish until the second day. The powders contained three grains of acetanilid, two grains of bicarbonate of sodium, and one grain of caffeine; hence the total dose was twelve grains of acetanilid.

Under no circumstances should acetanilid be administered alone, but always guarded by a cardiac stimulant. The intervals between doses should not be too short.—*Medicine.*

Digitalis in the Treatment of Heart Disease.—Dr. W. H. Washburn, in Merck's Archives, says: "The action of digitalis is upon muscular fibre, causing it to relax more slowly and to contract more quickly and perfectly. Its effects are not alone limited to the heart, but extend to the muscular system in general. Digitalis increases blood pressure and converts the intermittent circulation in the capillaries into a steady flow. The increased blood pressure lessens the rapidity of the heart's action, as well as does the action of the drug upon the vagus. The whole amount of blood in the arterial system is increased, and there is a corresponding lessening of the amount in the veins. This stimulates the absorption of serous exudates. The myocardium, like other tissues of the body, receives an increased blood supply, and consequently its nutrition improves, thus favoring compensating hypertrophy. Digitalis is not contraindicated in aortic regurgitation, and full pulse. The administration of digitalis is much hampered by fear of its cumulative effects. This is a real danger, as it is a drug that is absorbed slowly, and elimination is by no means rapid. In consequence we may have a chronic or acute intoxication if the doses are small and administered at short intervals. Chronic poisoning by digitalis results in contracted arterioles and in increase of resistance in the peripheral circulation. The coronary arteries, in common with other arterial trunks, share in this condition, and consequently, as a result of too free administration of the drug, the nutrition of the micardium is lessened, with a consequent aggravation of the heart failure.

The dose of digitalis that will prove tonic to the heart is a moderate one; this dose must only be repeated after a sufficient interval. If the dose be excessive and the interval between the doses too short, unfavorable results may follow. A fair dose of general application is the use of one grain of the powdered leaves, or its equivalent in any of the official preparations, administered once in twelve hours. This is a dose that can be continued for months or years without saturating the system. Such doses may not produce the immediate results which are often desired by the friends of patients, but under its administration a feeble, almost imperceptible pulse gradually improves, with a corresponding amelioration of the general symptoms. If large doses are employed, symptoms of saturation should be looked for, which is shown by a slowing of the pulse rate, lessened diuresis, and more rarely diarrhœa.—*N. E. Med. Monthly.*

Quinine as an Oxytocic.—According to the Bulletin of the Cleveland General Hospital for October, 1901 (Therapeutic Gazette, July, 1901), Professor Mc Gee believes that quinine possesses evident power as an oxytocic, although some authorities question whether

this phase of its action exists to any great degree. Giving it in an almost routine manner for years in cases of uterine inertia, he feels confident that it is worthy of trial when such a condition exists. It is doubtless true that it will not initiate labor pains when taken by a pregnant woman, but in the second stage of labor, when an obstacle to delivery is present, and the uterine contractions are deficient in force, it will frequently increase their power, and so hasten delivery. Its effects are without doubt due to a general tonic action and increase of nervous energy, rather than to any such specific power as ergot possesses, but it is devoid of the dangers of the latter, and so is a preferable agent to employ. It can be given with a feeling of safety and generally with satisfaction. The dose of ten grains usually recommended is quite large, and will often occasion vomiting, and five grains can generally be given every twenty minutes or so until about twenty grains have been taken. It is best to give it in solution, as it is more promptly absorbed, and when added to a small quantity of brandy or whiskey, diluted with hot water and well sweetened, is rarely refused. Sugar, as we know, is another agent to which oxytocic action has been attributed, but it probably acts as a rapidly available food, so producing force, and aiding in cases of exhaustion. While the solution of quinine is rather bitter, the patient will generally take it when assured it will benefit her, and by its aid one will often shorten an otherwise lengthy labor without detriment to the child or mother.

The claim has been made by eminent authority that quinine tends to produce post-partum hemorrhage. This, the author states, is contrary to his experience, as he has never seen a case which, in his opinion, could be attributed to it, and, on the contrary, has rather regarded it as a safeguard against such an occurrence. It is indicated most frequently in the inertia of multiparæ, with flabby muscles and a general atonic condition; and hence, with a fairly dilated os and pains deficient in power, quinine is quite effective in increasing their energy and efficiency, and many of this class of cases will readily respond to its action. Idiosyncrasy, middle-ear disease, or cerebral involvement would contraindicate its use, and tinnitus aurium is usually the only unpleasant effect. Should it fail, we still have the forceps in reserve, and as these cases are often lingering and exhausting, it is safer to know that the patient has received 15 or 20 grains of the drug, for its general tonic effect, as well, perhaps, as for its prophylactic power in diminishing the danger of septic infection. In incomplete abortion, too, its use will frequently be followed by the expulsion of the uterine contents; the general opinion is that ergot under such conditions should not be given, but the author can see no objection to the use of quinine, while after abortion its administration may aid involution, given alone or combined with the usual agents, as ergot, strychnine, or hydrastis.

INTERNAL MEDICINE AND NEUROLOGY.

UNDER THE CHARGE OF

J. ALLISON HODGES, A. M., M. D.,

PROFESSOR OF NERVOUS AND MENTAL DISEASES, UNIVERSITY COLLEGE OF MEDICINE, RICHMOND, VA.

WM. CLIFTON LYLE, M. D.,

INSTRUCTOR IN CHEMISTRY IN THE MEDICAL COLLEGE OF AUGUSTA, AUGUSTA, GA.

R. L. PAYNE, A. M., M. D.,

NORFOLK, VA.

CLINICAL QUANTITATIVE ANALYSIS OF PROTEIDS IN STOMACH CONTENTS.—Benedict (Buffalo Med. Jour., April, 1901) devised a ready method for the relative determination of the various proteids found in the stomach contents after a test breakfast. The subject has never been investigated before, and the researches of the author present, therefore, a novel interest. By centrifugalizing the stomach contents he separates them into three layers, the lower one consisting of undigested food, the upper of butter and mucus, the middle of comparatively clear liquid. The upper layer is removed with a swab and the middle one decanted and filtered in the usual way. Ten c.c. of the filtrate are boiled and the acid albumin centrifugalized, after cooling The number of graduations occupied by the sediment represents the percentage of acid albumin. The albumoses are next precipitated by adding 1 gm. of ammonium sulphate to the decantate. The salt is dissolved by the aid of heat, and when the solution is cool, it is subjected to 10,000 revolutions a minute and the percentage estimated by the depth of the sediment. One per cent. may be taken as the normal maximum. The peptones are precipitated by phosphomolybdic acid and the percentage estimated in a similar manner. By the use of this method it is possible to determine the extent of digestive work accomplished by the stomach. An excess of the lower forms of proteids will be found in cases of subacidity and deficiency of ferments. In cancer, for instance, we should expect at least 2% of acid albumin, probably as much albumoses, and only 5 or 10% of peptone, by bulk. It must also be borne in mind that an excess of an end-product may mean either usually good digestion or poor absorption. [The difficulty mentioned by Benedict in filtering the stomach contents may be overcome by the use of a filter pump.—A. R.]—*Int. Med. Mag.*

MOTOR INSUFFICIENCY OF THE STOMACH AND ITS MANAGEMENT.—Carter (The Polyclinic, April, 1901) states that motor insufficiency and dilatation of the stomach are not parallel terms, since it is possible to have one without the other. Hence it follows that an estimate of the size of the stomach is not altogether a reliable index and measure of the degree or existence of motor insufficiency. The cases of insufficiency are placed in two groups: (1) Those in which there is

simple deficiency of propulsive force; and (2) those in which there is obstruction at or in the neighborhood of the pylorus. The first group is again subdivided into (*a*) cases of simple atony and (*b*) cases of atony associated with gastritis, more especially the cases of gastritis characterized by marked hyperacidity. The second group is subdivided into (*a*) those in which the obstruction is simple in character, e.g., fibrosis of the pylorus, cicatrization after ulceration, and displacement of the stomach, and (*b*) those in which the obstruction is of a malignant nature. The diagnosis of motor insufficiency is established by splashing obtained at a period at which digestion ought to be complete, and by the passage of the stomach tube. The latter affords valuable information, both as to the quantity and the nature of the food delayed in the stomach. In simple atony gastric discomfort is produced by any kind of food, the quantity rather than the quality being the determining factor. On the other hand, if gastritis is present, actual pain is occasioned by the food, the nature of which plays an important part in its causation. In the differential diagnosis between simple atonic retardation and that due to obstruction, recourse is had to inflation of the stomach. A long history of gastric disturbance points to simple atony. A further diagnostic aid is to be obtained from an examination of the urine. In atony the urine is scanty, while in mechanical obstruction the amount is normal. In the consideration of the treatment the usual remedies and methods are recommended.

The Medical Treatment of Peptic Ulcer.—Shattuck (Jour. Amer. Med. Assoc., April 13, 1901) divides, for diagnostic purposes, gastric ulcer into three classes: (1) Those which are entirely latent and either present no symptoms at any time or are first manifest by hemorrhage or perforation. (2) Those with symptoms of indigestion not easily distinguishable from those of indigestion arising from other causes. (3) Those with diagnostic symptoms. The line of demarcation between the various classes is not absolute, inasmuch as certain developments in the progress of a case may transfer it from one class into another. As to treatment, he employs as a general rule two weeks' rectal feeding. This period is either shortened or lengthened in individual cases to meet special indications. If discomfort or hunger persist, he administers small doses (1-32 to 1-16 gr.) of morphine once or more during the day. This drug has a remarkable effect in checking gastric hypersecretion. The rectal enemas consist of from 6 oz. to 1 pt. of milk, or milk and egg with a pinch of salt. For thirst, small quantities of water are allowed occasionally by the mouth, or the water is introduced into the rectum or subcutaneously. An analysis of his own cases justifies the adherence to the two weeks' starvation treatment.—*Int. Med. Mag.*

On Immunity After Enteric Fever.—Nicol (Lancet, April 6, 1901, Int. Med. Mag.) questions the soundness of the generally accepted view that one attack of typhoid fever protects in a large measure

against subsequent infection. He says he has seen a number of patients in South Africa who had previously had the disease in India or elsewhere and cites several examples—one, a nurse, who had the third attack while on duty in South Africa. Another, an officer, who, while ill with his second attack, had three relapses, each time from three to five weeks after the temperature had fallen to normal. Again an officer who had a very severe attack, having eight distinct hemorrhages within a few days. Six months after his return to England he had a second attack, but much milder in type. The Widal reaction was positive on both occasions. Still another, a private, who had a second and milder attack five months after the first one. The writer believes that "under ordinary circumstances, the cause of the disease is only occasionally present, and when it is present the predisposing circumstances favoring its development may be entirely absent. The large majority of the population at home, therefore, escape the disease altogether, and it is consequently not surprising if very few of those who have had the disease once contract it a second time." [It is not possible to prove or disprove this view, but the same is true also of the following. In most large cities we have the disease with us more or less constantly, and it is within the bounds of reason to suppose that many have had it, perhaps in infancy or early childhood, when it would be more easy to overlook it, and thus is immunity conferred.] Nicol, in conclusion, says: "It seems to me that at present there is no proof existing of the presence of an immunity after an attack of enteric fever. Immunity varies so much in different diseases and in different individuals. Erysipelas leaves behind it apparently a predisposition to further attacks; diphtheria and pneumonia, as far as are known, give no protection [?] whilst an attack of one of the exanthemata usually protects its subjects very effectually. What place enteric fever is to take in this respect has still to be determined." [The above is not at all dissonant with the common view. Second attacks of scarlet fever and small-pox are far from being unknown, yet they are rather rare. In fact, any of the exanthemata may occur more than once in the same individual, though it is the exception, not the rule, and, further, the degree of immunity conferred varies with the disease, being more pronounced in the case of small-pox and scarlet fever, for instance, than in typhoid.—W. E. R.]

The Tuberculin Test.—Twining (Occidental Med. Times, April, 1901) gives an outline of the mode of preparation of Koch's tuberculin as originally made, also his later products, T-O, A and R, and then proceeds to state that it is of unquestionable value as a diagnostic agent in the early stages of tuberculosis, stages unrecognizable, at least definitely so, by any other means. "It produces hyperemia of all the tuberculous tissues, a local reaction, and, as a result of this hyperemia, much toxin stored up in the tubercles is thrown upon the general circulation, and produces fever and the

characteristic symptoms known as the general reaction." The temperature should be carefully recorded several times a day for a few days prior to the application of the test. Fever is a contraindication to its employment. From .5 to 2 mg. of tuberculin should be injected into the back or thigh muscles, preferably in the evening. If no rise of temperature occurs within 24 hours, the result may be considered negative. Doses of 1 to 15 mg. do not affect healthy individuals. Several illustrative cases are cited.—*Int. Med. Mag.*

Total Tuberculosis of Both Suprarenal Capsules, Without Addison's Disease.—Le Roy (Jour. des Sci. Med. de Lille, June 1, 1901) gives the history of a man of 39, of spare build but of previous good health, who sought treatment on account of an anal fistula. He recovered; but two months later was taken with headache and convulsions involving arms and legs, cerebral vomiting, paralysis of left side of face, drooping of left eyelid, right lateral deviation, Kernig's sign, incontinence of urine and feces—death. Necropsy showed a large cavity of long standing in the right apex, also an old, firm, complete pleural adhesion of same side. No tubercles in right lung. On left side, a few adhesions about apex, where three or four caseous nodules were found, also small gray tubercles through left upper lobe. Old tuberculous ulceration of small intestine. None in liver or spleen or kidneys. Suprarenal capsules were large, and their substance entirely usurped by caseous material. Tuberculous meningitis was also present. Though there are still adherents to the view that disease of the adrenals necessarily begets Addison's disease, such a contention is no longer tenable, as the above case proves. The adrenals have been totally replaced by metastatic sarcoma without the development of Addison's disease. Further, in some cases (12 per cent. of 684 cases, according to Lewin), the adrenals have been found unchanged in typical cases of the disease. Experimentally, Brown-Sequard has shown that complete ablation of these organs is followed by death. Abelous and Langlois destroyed the adrenals of frogs by heat. Death followed in from twelve to thirteen days in a hibernating frog, and 48 hours in active frogs. In large animals, the animal survives if only $\frac{1}{6}$, by weight, of an organ is allowed to remain. Again, the blood of an acapsulated animal is toxic; when injected into a recently acapsulated animal, death rapidly ensues, due to paralysis; injected into a healthy animal, somnolence and profound weakness. [In the present state of our knowledge all that can be said is, that in the majority of cases Addison's disease is associated with an evident lesion of the adrenals, and that both clinical and experimental evidence point to some disturbance of their function as the cause of the disease. It is possible, too, that some subtle change in the nerve plexus in the immediate neighborhood may be more or less directly concerned in some cases. —W. E. R.]—*Int. Med. Mag.*

GENERAL ORTHOPÆDIAC AND GENITO-URINARY SURGERY.

UNDER THE CHARGE OF

WM. H. DOUGHTY, JR., A. B., M. D.

PROFESSOR OF ANATOMY AND CLINICAL SURGERY, MEDICAL DEPARTMENT UNIVERSITY OF GEORGIA AUGUSTA, GA.

HUGH M. TAYLOR M. D.

PROFESSOR OF SURGERY IN THE UNIVERSITY COLLEGE OF MEDICINE, RICHMOND, VA

GEORGE R. WHITE, M. D.

FORMERLY INSTRUCTOR IN SURGERY N. Y. POST-GRADUATE SCHOOL AND HOSPITAL; LATE ACTING ASST. SURGEON U. S. A., SAVANNAH, GA.

AN IMPROVED METHOD OF TREATING HIGH-SEATED CANCER OF THE RECTUM.—Robert F. Wier, New York (Med. News, July 27, 1901). The author's method of removing high-seated cancer of the rectum is a modification of Maunsell's method. The abdomen is opened in the median line above the pubis and the intestines retracted by a wire detractor covered with gauze. The peritoneum is opened and ligatures passed around the bowel above and below the tumor which is then excised and taken out through the abdominal wound. It is usually advisable to ligate the superior hemorrhoidal artery before excising the tumor. The cut ends of the gut are touched with pure carbolic acid and washed off with alcohol to prevent infection taking place, and the cauterized ends are subsequently cut off. A pair of dressing forceps are passed up the anus and the upper end of the gut is drawn down and at the same time the lower end is everted and both ends brought out of the anus. The two ends are now sutured by the well known method of Maunsell. The rectum is then drawn up into the abdomen and the peritoneum closed. A drainage tube is passed up between the anus and cocyx to the site of the tumor. The surgeon himself does the abdominal operation only, while an assistant everts the bowel, sews the ends together and places the perineal drain. Three cases are reported. One died, one had no recurrence, and one was discharged after two months and the subsequent course of the disease is not reported.

GEORGE R. WHITE.

PRESENT STATUS OF THE CARCINOMA QUESTION.—N. Senn, Chicago (Med. Rec., July 13, 1901). A carcinoma is a tumor resulting from an atypical proliferation of epithelial cells from a matrix of embryonal cells of congenital or post-natal origin. A primary carcinoma can not occur in a mesoblastic tissue unless embryonal epithelium has been misplaced during development or by some injury after birth. The histology and histogenesis of carcinoma speak against its parasitic origin, and recent experiments do not warrant us to claim for this disease a bacterial origin. At present the only satis-

factory remedy is the knife, and the permanency of the result can not be determined in less than ten years after the operation. In the search for curative agents one should make experiments with a view of finding something to cause a degeneration of the parenchyma or convert the embryonal cells into mature epithelial cells, thus converting a carcinoma into a benign epithelioma. GEORGE R. WHITE.

AN OPERATION FOR THE RADICAL CURE OF UMBILICAL HERNIA.—Wm. J. Mayo, Rochester, Minn. (Ann. of Surg., August, 1901). Umbilical hernia is treated according to the principles of the "overlapping operation" of Champtonniere employed in the radical cure of inguinal hernia.

Transverse eliptical incisions are made surrounding the umbilicus and hernia and carried down to the neck of the sack, and the aponeuratic structures are cleared an inch and a half in all directions. The peritoneal cavity is opened at the neck of the sack; intestines replaced and the sack and adherent omentum ligated and excised. The sides of the wound are grasped with forceps, and whichever way overlapping of the flaps is most easily accomplished suggests the direction of the closure. Usually overlapping from above downward is the easiest, and for these cases a transverse incision is made through the aponeurosis extending an inch on either side of the opening and the deep fascia on the upper edge of the incision freed from the peritoneum for half an inch. A row of silver wire matrass sutures is passed through the edge of the deep fascia of the lower incision and half an inch above the edge of the fascia in the upper side of the incision. When these sutures are drawn tight they cause the upper flap of the deep aponeurosis to overlap the lower, and the edge of the upper flap is attached to the surface of the lower by catgut sutures. The superfacial fascia is closed in the same manner. Silver wire in aponeurotic structures remains embedded without causing irritation. The results of all the cases operated upon thus far have been good. GEORGE R. WHITE.

ARTIFICIAL PRODUCTION OF CONNECTIVE TISSUE BY MEANS OF INJECTIONS OF AJAR AJAR.—S. P. Kramer, Cincinnati (Ann. of Surg., August, 1901). When a 4 per cent. neutral solution of ajar ajar in normal salt solution is injected into the pleural cavity of a rabbit and the animal killed after 48 hours, the mass is found to have lost its gelatinous appearance and resembles an ante-mortem heart clot in appearance, and upon hardening a piece and examining a section with a microscope it is found that the jelly has become honeycombed with small round cells. These cells increase in number and other changes take place, till at the end of about thirty days the mass is organized into new connective tissue and is perforated with blood vessels.

The jelly must be injected with antiseptic precautions, in a warmed syringe, at a temperature of 40° F. An addition of 1-2000 formal-

dehyde will insure the aseptic condition of the mass without interfering with the formation of connective tissue.

This material may be injected wherever it is desirable to produce a growth of new connective tissue, and we may expect benefit from its use in hernias, aneurisms, hydrocells, bone cavities, tubercular cavities and deformities. GEORGE R. WHITE.

A New Local Treatment of Erysipelas.—G. Lenox Curtis (Med. Record, April 20, 1901). The writer proceeds on the theory that sulphate of sodium applied over the diseased area deprives the bacteria of oxygen and their further development is impossible.

The treatment consists in cleansing the part affected thoroughly, being careful to remove all greasy substances. A sufficient quantity of sodium sulphate is mixed with cold water to make a mass the consistency of thick cream. The diseased area is covered with a single layer of gauze, over this is applied a thick layer of the sodium sulphate and the whole is covered with a pad of gauze, which is held in place by sticking plaster or bandage. Ice water is poured on the poultice from time to time. Six or eight hours is said to be sufficient to destroy all the germs. GEORGE R. WHITE.

Etiology of Chancroid.—Lenglet (Ann. de Derm. et de Syph., March, 1901) details some results obtained from his researches concerning the Ducrey bacillus as the etiologic factor in chancroid. In cases presenting the clinical appearance of chancroid the pus from the ulcers, being examined, was found to contain the bacillus of Ducrey. Inoculations under strict antiseptic precautions were then made on the thigh of the patient, the points of inoculation being covered with a watch crystal and ordinary surgical dressings. In two days the inoculations were found to have "taken." The pus when examined showed the same Ducrey bacillus. These inoculation ulcers were treated with bichlorid solution and covered with absorbent cotton. Three days later pus from these lesions was transferred to a culture medium known as "skin gelose," prepared by treating integument of the human cadaver with pepsin and pancreatin, under the influence of heat. The peptone thus formed was further humanized by blood drawn from a vein of the arm. The microscope showed the subsequent cultures to be made up entirely of the Ducrey bacillus. Inoculations with these cultures on a healthy young subject was followed in two days by the appearance of a typical chancroid, which in turn was found to contain the Ducrey bacillus.

The latest operation in surgery is called hepaticocholecystastteosistomy. A man who could survive such a thing as that would have something worth leaving to his posterity.

OBSTETRICS AND GYNÆCOLOGY.

UNDER THE CHARGE OF

J. W. LONG, M. D.,

EMERITUS PROFESSOR OF GYNÆCOLOGY, MEDICAL COLLEGE OF VIRGINIA, SALISBURY, N C.

JOSEPH EVE ALLEN, M. D.,

PROFESSOR OF OBSTETRICS AND PEDIATRICS, MEDICAL DEPARTMENT UNIVERSITY OF GEORGIA AUGUSTA, GA.

WILLIAM S. GARDNER, M. D.,

INSTRUCTOR IN GYNÆCOLOGY IN THE COLLEGE OF PHYSICIANS AND SURGEONS, BALTIMORE, M. D.

EDWARD NICHOLAS LIELL, M. D.,

JACKSONVILLE, FLA.

FORMERLY LECTURER GYNECOLOGY NEW YORK POLYCLINIC, AND VISITING GYNECOLOGIST ST. ELIZA BETH HOSPITAL, NEW YORK.

LACERATION OF THE CERVIX TO BE CONSIDERED, USUALLY, MORE OF A NORMAL THAN A PATHOLOGICAL CONDITION—Dr. J. B. Deaver's views on the foregoing are of a radical nature, claiming that, in the absence of spinal indications, a lacerated cervix in a woman who has borne children is to be usually considered more of a normal than a pathological condition, and that such had better be let alone. Should, however, a lacerated cervix be extensive enough to permit gaping of the edges and consequent exposure of the cervical mucus membrane to injury, or if ulceration be present, or if the scar tissue be hard and in excessive amount, or if any of these conditions give rise to subinvolution or marked reflex symptoms, then operation is indicated. Any history of hereditary tendency towards malignancy provides the strongest indication for operation also. And this should be repeated after subsequent labors if the cervix be torn again. One is not justified, however, in operating unless there is freedom from all pelvic inflammatory processes or their results, such as salpingitis, pyosalpingitis, or adhesions. Under such circumstances, abdominal section for the correction of intra-abdominal trouble should follow immediately upon trachelorrhaphy. Great care must be exercised in endometritus to properly prepare the endometrium prior to trachelorrhapy, in order to provide adequate drainage. He rightly warns against the habit of bringing the cervix down to the vulvar orifice by forcible traction during operation, traction be simply sufficient to steady the uterus. A latent salpingitis can be converted into an active one, or the breaking up of peri-uterine adhesions may liberate septic foci by forcible traction. He is averse to intra-uterine irrigation, or the use of iodoform gauze packing as a means of drainage, except in septic conditions.—*Amer. Jour. Surg. & Gyn., August.*

E. N. L.

ROUND LIGAMENT SUSPENSION OF THE UTERUS.—The claim is made by Dr. T. Todd Gilliam, that all ventral suspensions of the uterus of whatever kind are mere make-shifts, and that anchorage of the uterus by means of the round ligaments is the nearest approach to the

ideal, both from a physiological and from a utilitarian standpoint. A method of operation devised by the author is given as follows: A median abdominal section is made from three to four inches long; any adhesions are broken up and the fundus brought forward. While in the Trendelenburg position the round ligament on one side is seized, brought to the opening, and a silk thread is then carried under the ligament by means of an aneurism needle at a distance of about one and one-half inches from the fundus. The other round ligament is then secured in the same manner, and the ends of the thread brought out of the abdomen and held in the bite of another snap-forceps. The fascia, muscle and peritoneum at the margin of the incision are then caught with a vulsellum an inch or more from the lower angle of the incision, and easy traction made. Specially-devised perforating forceps are next thrust through the tissue, the thread which holds the round ligament seized and the forceps withdrawn. The ligament being thus brought through the perforated wound, it is held taut and then fastened into the wound. The opposite ligament is next treated in the same manner and the median abdominal incision closed.—*Amer. Jour. Surg. & Gyn., June*, 1901.

E. N. L.

Accidents Relating to Pregnancy Following Ventral Fixation.—Dr. R. L. Dickinson of Brooklyn relates two accidents following ventral fixation of the uterus—one pregnancy ending in rupture of the uterus; the other, dystosia so marked as to require Cæsarean section. The latter case presented three points of interest: 1. The uterus was more displaced, more upside down, so to speak, with a cervix located higher above the promontory than in any case he could find reported, namely, at the third lumbar vertebra. 2 The stretching or distension was not, as usual, at the expense of the posterior wall chiefly, helped by contributions from the lateral walls, with a squat uterus as a result, but was largely from the right lateral wall. 3. Failure to recognize this new condition—lateral distension—prevented the author from considering liberation of the adhesions in the seventh month.—*Amer. Jour. Surg. & Gyn., June*, 1901.

E. N. L.

Myomectomy of Nine Myomas During Pregnancy; Delivery at Term.—In a paper read at the June meeting of the American Gynecological Society, Dr. J. Duncan Emmet records the following interesting case, the diagnosis of positive pregnancy not being made because distinct objective symptoms were not present owing to the presence of tumors. The history, as detailed, was as follows: Patient, aged 30; twice married within three years. Menstruated first at 15; had always been somewhat irregular, period occuring usually every five weeks; flow scanty, duration three days, pain being severe on first day. No previous pregnancies. Last menstruation about three months previous to consultation. At the time of consultation patient complained of almost continual backache, breasts somewhat

enlarged with darkened areola; some nausea in the morning for the past month. Examination showed a large uterus filling the pelvis, os retroverted. Several myomas were felt in the body of the organ. A diagnosis of multiple myoma, with probable pregnancy, was made. Abdominal section revealed the uterus studded with myomas varying in size from a pea to a hen's egg, several pedunculated and others sub-peritoneal, situated in the region of the fundus. These were removed, closing each peritoneal incision with continuous catgut ligature, in several instances the ligature being carried deeply into the interstitial tissue. Nine tumors were thus removed, hemorrhage being inconsiderable. Abdominal incision closed with interrupted silver wire sutures. Convalescence was uneventful. She subsequently passed through full-term labor without any untoward symptoms.—*Amer. Jour. Surg. & Gyn., July*, 1901. E. N. L.

Treatment of Puritus Vulvæ.—Siebourg-Barmen (Centralblast für Gynecologie, June, 1901). The author has made use of the observation that the skin remains partially anæsthetized after injection of a considerable quantity of normal salt solution and injects about a third of a litre by means of an irrigator, in old cases of puritus vulvæ that have resisted all other methods of treatment. The results have been very gratifying thus far. He is making experiments with other substances, including carbolic acid and antipyrin solution. Ether may prove to be the best material, as the skin sometimes remains partially anæsthetic for weeks after an injection of ether.

GEORGE R. WHITE.

The Relation of Ovarian Disease to Insanity, and its Treatment. —Hobbs (Amer. Jour. of Obstet., April, 1901) discusses the relation of ovarian disease to insanity. The interdependence of the organ of reason and the organs of reproduction is clearly shown by the history of 40 cases of ovarian disease with complicating insanity, and by the good mental results which followed surgical treatment of the different ovarian lesions. The insanity usually appeared during the onset of ovulation or a few days prior to menstruation; or the maniacal propensities or delusions already existent became exaggerated. The most frequent type of ovarian insanity is that of mania. Sexual delusions were the exception, but when present, were pronounced. Over 47 per cent. recovered their mental condition after operation, and the majority of these improved very rapidly, being perfectly well mentally inside of three months.

[This paper clearly illustrates the benefit and emphasizes the necessity for a thorough gynecologic examination being made of all women suffering from nervous or mental disorders.—W. K.]

The Oncome of Age

The value of a stimulant in the enfeebled digestion of the aged has been recognized from the earliest time.

For those who decline to accept the aid of wine and who need something of a stimulant character to rouse the flagging powers of digestion,

"Fellows' Syrup of Hypophosphites"

Offers Special Advantages.

In all conditions commonly seen in persons of Advancing Life, a tonic like Fellows' Syrup is clearly indicated.

Dr. Milner Fothergill wrote: "It (Fellows' Hypophosphites) is a good all-round tonic, specially indicated where there is NERVOUS EXHAUSTION."

Medical letters may be addressed to

MR. FELLOWS, 26 Christopher St., New York.

Scott's Emulsion gives cod-liver oil a passport into the sensitive system. None of the oil is left out. It passes through the walls of the alimentary canal in full strength carrying with it all of its mysterious medical qualities.

Scott's Emulsion has been the standard preparation of the whole oil for twenty-five years.

SCOTT & BOWNE, Chemists, 409 Pearl St., New York.

GLYCO-HEROIN.

(SMITH)

Coughs, Bronchitis, Phthisis, Asthma, Laryngitis, Pneumonia and Whooping Cough.

Glyco-Heroin (Smith) has passed the scrutiny of both clinical and scientific investigation and its therapeutic value has been well defined and established by prominent men in the profession of medicine.

Each teaspoonful represents one-sixteenth grain Heroin with

A true exact solution of Heroin in Glycerine.

Ammonium Hypophosphite
Hyoscyamus
White Pine Bark
Balsam Tolu
Glycerine and Aromatics.

Permanent and unalterable through age.

to enhance the palliative effect of Heroin and to embody decided curative properties in this preparation.

Glyco-Heroin (Smith) places at the command of the physician and for his convenience a most superb and finished remedy to be accepted and used by him as an ethical preparation with physical characteristics and therapeutic properties far excelling all other remedies of the Materia Medica and Pharmacopœa for the treatment of Coughs in all the various forms.

Adult dose—one teaspoonful.

The quantity ordinarily ordered by the physician is two, three or four ounces.

Physicians are requested to write for samples.

SUPPLIED BY ALL RETAIL DRUGGISTS THROUGHOUT THE UNITED STATES.

MARTIN H. SMITH CO.
68 MURRAY ST., NEW YORK, U. S. A.

Unlike Cathartics and Drastic Purgatives

CHIONIA

GENTLY STIMULATES THE LIVER AND OVERCOMES HABITUAL CONSTIPATION

GRADUALLY BUT EFFECTUALLY

DOSE: A teaspoonful 3 or 4 times a day.

Prepared from *Chionanthus Virginica*, from which the inert and objectionable features of the drug have been eliminated.

PEACOCK'S

BROMIDES

Chemically Pure. Uniform in Strength. Definite in Action.

DOSE: One to three teaspoonfuls as indicated.

Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.

Full size sample to physicians who will pay express charges.

HALF-POUND BOTTLES ONLY. **PEACOCK CHEMICAL CO., St. Louis.** BEWARE OF SUBSTITUTION.

COLLEGE OF PHYSICIANS AND SURGEONS

OF BALTIMORE.

The Thirtieth Course of Lectures will begin on October 1, 1901. The course i graded and attendance upon four sessions of six months each in four separate years i required. The New College Building, with the extensive Laboratories, is complete In all essential features it will be found one of the best structures in America. Abund ant Clinical material is furnished by the Baltimore City Hospital, Nursery and Child Hospital, Bay View Hospital, Hospital for the Colored Race, and the Marylan Lying-in Asylum.

For a catalogue and other information, write to

THOMAS OPIE, M. D., Dean, Calvert and Saratoga Streets,

BALTIMORE, MD.

When writing mention the Georgia Journal of Medicine and Surgery.

New Books for Practitioners and Students

LEA BROTHERS & CO., Publishers,

PHILADELPHIA. NEW YORK.

HARRINGTON'S PRACTICAL HYGIENE. Just Ready.

Octavo, 721 pages, 105 engravings, 12 plates. Cloth, $4.25, *net.*

WHITMAN'S ORTHOPEDIC SURGERY. Just Ready.

Octavo, 642 pages, 447 illustrations, mostly original. Cloth, $5.50, *net.*

MUSSER'S MEDICAL DIAGNOSIS. 4th Edition. Just Ready.

Octavo, 1104 pages, 250 engravings, 49 plates. Cloth, $6.00; leather, $7.00, *net.*

DUNGLISON'S DICTIONARY. 22d Edition (with portrait). Just Ready.

Octavo, 1350 pages, with thumb index. Cloth, $7.00; leather, $8.00, *net.*

DUDLEY'S GYNECOLOGY. 2d Edition. Just Ready.

Octavo, 717 pages, 453 engravings, 8 colored plates. Cloth, $5.00; leather, $6.00; half morocco, $6.50, *net.*

JEWETT'S PRACTICE OF OBSTETRICS. Just Ready.

Octavo, 763 pages, 441 engravings, 22 colored plates. Cloth, $5.00; leather, $6.00; half morocco, $6.50, *net.*

TAYLOR ON GENITO-URINARY AND VENEREAL DISEASES AND SYPHILIS. New Edition. Just Ready.

Octavo, 720 pages, 130 engravings, 27 colored plates. Cloth, $5.00; leather, $6.00; half morocco, $6.50, *net.*

STIMSON ON FRACTURES AND DISLOCATIONS. Just Ready.

Octavo, 842 pages, 336 engravings, 32 plates. Cloth, $5.00; leather, $6.00, *net.*

CUSHNY'S PHARMACOLOGY. New Edition. Just Ready.

Octavo, 732 pages, 47 illustrations. Cloth, $3.75, *net.*

ROBERTS' MODERN SURGERY. New Edition. Just Ready.

Octavo, 838 pages, 474 engravings, 8 plates. Cloth, $4.25; leather, $5.25, *net.*

DUANE'S MEDICAL DICTIONARY. 3d Edition. Just Ready.

Comprising Medical, Dental, Pharmaceutical and Veterinary Terms. Square octavo, 656 pages, 8 plates. Cloth, $3.00; limp leather, $4.00, *net.*

HARE'S PRACTICAL DIAGNOSIS. 4th Edition.

Octavo, 623 pp., 205 engs., 14 plates. Cloth, $5.00; half morocco, $6.50, *net.*

When writing mention the Georgia Journal of Medicine and Surgery

Since I have known . .

ACNEINE

my most satisfactory and profitable practice
has been in the treatment of . . . . . .

"DISEASES OF THE SKIN."

The above testimonial is only one out of thousands. If you have a patient suffering with **Acne or any Eruptive Skin Disease**, send for a **Free Sample** of **ACNEINE** and give it a trial.

ACNEINE PHARMACAL CO.,

OMAHA, NEB.

WHEELER'S TISSUE PHOSPHATES.

Wheeler's Compound Elixir of Phosphates and Calisaya. A Nerve Food and Nutritive Tonic for the treatment of Consumption, Bronchitis, Scrofula and all forms of Nervous Debility. This elegant preparation combines in an agreeable Aromatic Cordial, *acceptable to the most irritable conditions of the stomach:* Say—Bone Lime Phosphate, Soda Phosphate, Iron Phosphate, Phosphoric Acid, and the active Principles of Calisaya and Wild Cherry.

The special indication of this combination of Phosphates in Spinal Affections, Caries, Necrosis, Ununited Fractures, Marasmus Poorly Developed Children, Retarded Dentition, Alcohol, Opium, Tobacco Habits, Gestation and Lactation, to promote Development, etc., and as a *physiological restorative* in Sexual Debility, and all used-up conditions of the Nervous System, should receive the careful attention of good therapeutists.

NOTABLE PROPERTIES:—As reliable in Dyspepsia as quinine in Ague. Secures the largest percentage of benefit in Consumption and all Wasting Diseases, *by determining the perfect digestion and assimilation of food.* When using it Cod Liver Oil may be taken without repugnance. It renders success possible in treating chronic diseases of Women and Children, who take it with pleasure for prolonged periods, a factor essential to maintain the good-will of the patient. Being a Tissue Constructive, it is the best *general utility compound* for Tonic Restorative purposes we have, no mischievous effects resulting from exhibiting it in any possible morbid condition of the system.

DOSE: For an adult, one tablespoonful three times a day, after eating; from seven to twelve years of age, one dessertspoonful; from two to seven, one teaspoonful; for infants, from five to twenty drops, according to age.

Prepared at the Chemical Laboratory of T. B. WHEELER, M. D. Montreal, P. Q.

To prevent Substitution, put up in Pound Bottles only and sold by all Druggists at One Dollar.

READ THE PAMPHLET SENT YOU.

Since the First . . .

ROCHESTER LAMP was made there have been many "like" or "as good as" it placed upon the market. Some were even said to be "improvements" on it. One by one they fall by the wayside, for experience proves that there is only one lamp that is really better, and we make that, too,

THE NEW ROCHESTER

In it we embody all that is really worth having in a lamp, both as to quality and style. Don't forget, *every genuine New Rochester has the name on the lamp.*

We can fill every lamp want. No matter whether you want a new lamp or stove, an old one repaired or refinished, a vase mounted or other make of lamp transformed into a NEW ROCHESTER, we can do it. Let us send you literature on the subject.

THE ROCHESTER LAMP CO., 88 Park Place and 88 Barclay St., NEW YORK.

THE THERAPEUTIC FORUM.

All independent communications from regular practitioners, whether for or against the claims of any reputable therapeutic preparation, will be welcome to these columns.

This department is for the publication of reports from reputable physicians upon new preparations, for clinical and laboratory notes, and is open for general discussion upon the merits of articles presented for the approval of the profession by reputable pharmaceutical concerns.

EVERYBODY KNOWS

the condition—it's so extremely common and rebellious; some physicians call it general debility, or malnutrition, or nervous exhaustion, or a host of other names. Whatever its name or its cause, there exist the very striking facts that the blood has been impoverished, the nervous system ravished, the vitality sapped out. It would seem extremely rash to make the statement that any one remedy is equally efficacious in all of these cases, particularly so when the usually employed tonics—iron, strychnine, cod liver oil, etc.—have utterly failed. Yet such is the statement of thousands of physicians whose names are everywhere the synonyms for eminence, integrity, ability; physicians who represent all that is best in ethical, scientific medicine. It is this class of physicians who make the unqualified assertion that Gray's Glycerine Tonic Comp. is uniformly effective in malnutrition, general debility, nervous prostration—whether the condition accompanies organic disease, acute infectious diseases, or exists without ascribable cause. Gray's Tonic begins aright in these cases; it makes a friend of the rebellious stomach—makes it docile, receptive, retentive. The patient improves from the start—has more strength, less depression and exhaustion. The physician notes the patient's ability to eat, digest and assimilate food—the dormant nutritive functions seem to assume new life. The blood rapidly regains the necessary elements for healthful nutrition of the entire body—the red blood corpuscles and hæmoglobin increase hand in hand; nervous force, vitality, is re-engendered; irritability, sleeplessness and exhaustion disappear. Restoration of constitutional vigor and return to health is but a natural sequence; it usually results in a surprisingly short time. Skepticism as to the truth of these facts may be entertained by those who have *never* given Gray's Tonic a fair clinical trial; but with those physicians who have tried the remedy, skepticism has yielded to the inexorable verdict of facts—actual, accomplished results. The experience of countless physicians leaves no ground for doubt that Gray's Tonic is the remedy *par excellence*—the pleasant, uniformly effective remedy—in waste of tissue and impoverishment of blood and vitality. Its *rapidity* of action is especially noticeable in convalescence from typhoid fever, la grippe, pneumonia and other exhausting ailments. Its uniformity of action is a certainty in all.

Gray's Glycerine Tonic Comp. owes its distinctive value to the proportion of the contained ingredients and their manner of combination. All imitations lack these characteristics of the original and are consequently of inferior value.

BAYER

TANNIGEN
INTESTINAL ASTRINGENT

LACTO-SOMATOSE
THE FOOD IN GASTRO-INTESTINAL AFFECTIONS

TANNOPINE
The INTESTINAL ASTRINGENT and DISINFECTANT

FERRO-SOMATOSE
The FERRUGINOUS NUTRIENT

PROTARGOL
The ANTIGONORRHOICUM AND SUBSTITUTE FOR SILVER NITRATE

HEDONAL
The PROMOTER OF NATURAL SLEEP

EUROPHEN
The ODORLESS AND NONTOXIC IODOFORM SUBSTITUTE

SOMATOSE
NUTRIENT TONIC, RESTORATIVE

HEMICRANIN
The SPECIFIC FOR HEADACHE

EPICARIN
The NONPOISONOUS DERMAL PARASITICIDE

ASPIRN
The AGREEABLE AND EFFICIENT SUBSTITUTE FOR THE SALICYLATES

FOR SAMPLES AND LITERATURE OF ABOVE PRODUCTS apply to

PHARMACEUTICAL PRODUCTS

FARBENFABRIKEN of ELBERFELD CO.
40 STONE ST. New York
P.O. BOX 2900

PRIVATE SANATORIUM

OF

DR. T. M. McINTOSH.

Buildings of brick, with all modern conveniences for heat, light and ventilation. Operating-room can be flooded with water. Sterilizing apparatus and operating-room outfit complete, bought partly in Europe a few years ago, and recently in Philadelphia. Graduated trained nurses from Philadelphia.

General and Special Surgery.

Address T. M. McINTOSH, M.D., Thomasville, Ga.

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—
CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. OD CHEM. CO., NEW YORK.

DR. C. C. STOCKARD,
Drug Habits.

DR. S. G. C. PINCKNEY,
Nervous Diseases.

THE ATLANTA RETREAT,

A PRIVATE SANATORIUM FOR THE

Treatment of DRUG HABITS and NERVOUS DISEASES.

FOR FURTHER PARTICULARS, ADDRESS

DR. C. C. STOCKARD,

103 Walton Street, - - ATLANTA, GA.

PRIVATE SANATORIUM

OF

Wm. Simpson Elkin, M.D., and Hunter P. Cooper, M.D.,

FOR

GENERAL AND ORTHOPEDIC SURGERY.

Modern four-story granite and brick building, fifty-two rooms. Heated by hot water. Lighted by electricity and gas. Perfect plumbing and ventilation. All rooms have sunny exposure. Resident house surgeon, and best trained graduate nurses. Modern operating room, and complete sterilizing apparatus.

Address DRS. ELKIN & COOPER, Atlanta, Ga.

The Allison Physicians' Table.

This style, No. 34, our latest achievement, is the acme of perfection—glass trays in cabinets, adjustable stirrups and crutches, and interior finished in white enamel.

The ALLISON CHAIR has no superior. It has been a leader for years.

Our line of Instrument, Medicine and Combination Cabinets can not be equaled.

Second-hand chairs and tables for sale cheap

Catalogue A Free.
Rolling Chairs—Catalogue B.

W. D. ALLISON CO.,
MANUFACTURERS.
Pennsylvania & South Sts., INDIANAPOLIS, IND.

Hotel Bartholdi . . . .

BROADWAY AND 23rd STREET,
NEW YORK CITY.

Facing Madison Square Park. Newly furnished throughout. Near all the big stores and places of amusement. Cars pass the door for all R. R. stations and steamboat landings. Large Sample rooms for Commercial Travelers.

HERE you will find no grand and magnificent decorations; no luxurious grandeur; no awe-inspiring surroundings; no elaborate bill of fare, printed in French; no clerks that will disdain to speak to you; no employees in any way inattentive, but just a cozy, home-like little hotel that will appeal to the hearts of those who are looking for solid comfort. Good, plain American cooking and affable and courteous treatment. . . . . .

MILTON ROBLEE, Proprietor.

MEDICAL COLLEGE OF VIRGINIA.

ESTABLISHED 1838.

The Sixty-Fourth Session will commence October 1st, 1901.

Department of Medicine, four years' course, fees .... $65 per session.

Department of Dentistry, three years' course, fees ..... $65 per session.

Department of Pharmacy, two years' course, fees... ..... $60 per session.

No extras for Laboratory Work and Dissections.

For further particulars and catalogue, address

CHRISTOPHER TOMPKINS, M. D., Dean,

RICHMOND, VA.

Polk's Medical Register

(Seventh Revised Edition)

will appear in due time. Send for descriptive circulars. Physicians who have moved since 1898 should notify the publishers promptly.

Polk's Medical Directory has been established 15 years. Do not be deceived by untried and unknown imitations.

R. L. POLK & CO., Publishers,

DETROIT, MICH.

ATTENTION!

We Offer to Make, Absolutely Free of Charge,

A LIFE SIZE PORTRAIT

In Oilette, Pastel, Water Color, Sepia, India Ink or Crayon.

In order to introduce our excellent work, we will make **Free of Charge, a Life Size Portrait,** copied and enlarged from any photo, tintype, gem, daguerreotype, etc., to any one sending it to us. Our work is excellent, our likenesses are striking, our finishes the most artistic. Small pictures always returned on demand. If you wish to possess a valuable life-like portrait in Oilette, Pastel, Water Color, India Ink or Crayon, of yourselves, children, father mother, dear absents or departed, **FREE OF CHARGE,** send in your photo to

THE CONTINENTAL ART CO.

155-157 E. Washington St. - CHICAGO.

IN ANEMIA WITH MALARIAL COMPLICATIONS

CASSEBEER'S
Iron and Manganese Peptonate
with Arsenic

H. A. Cassebeer, Chemist, New York.

McK. & R. COMPOUND STEARATES.

McK. & R. COMPOUND STEARATE OF ZINC.

The ideal dusting and insufflating powder. Prevents chafing and pruritus. "An absolute specific" for chafing of infants and corpulent people. Clings to moist surfaces, resists moisture, never cakes nor becomes sticky, and does not soil the clothing.

Supplied plain or in combination with antiseptic medicaments. . . . . .

McK. & R. COMPOUND STEARATE OF ZINC WITH BORIC ACID.

McK. & R. COMPOUND STEARATE OF ZINC WITH BALSAM PERU.

McK. & R. COMPOUND STEARATE OF ZINC WITH MENTHOL.

McK. & R. COMPOUND STEARATE OF ZINC WITH TAR.

We supply, also, combinations with Acetanilid, Aristol, Bismuth Subgallate (Dermatol) Europhen, Chrysarobin, Cocaine and Menthol, Eucalyptol, Ichthyol, Iodoform, Resorcin, Salicylic Acid etc.

Samples and Literature Free on Application.

McKESSON & ROBBINS, New York.

USED ALL OVER THE WORLD.

EMISSINE

POSITIVELY
CURES
INVOLUNTARY
SEMINAL
EMISSIONS

500 PILLS $5.00
TRIAL PACKAGE 200 PILLS $2.50
FIFTY CENTS. 1000 PILLS $9.00

LITERATURE ON REQUEST.
CABLE ADDRESS EMISSINE, ST. LOUIS, U.S.A.

Order From Your DRUGGIST or JOBBER or Address.

ST. LOUIS PHARMACEUTICAL COMPANY.
(INCORPORATED)
ST. LOUIS, MISSOURI, U. S. A.

CACTINA PILLETS

Will nurse the heart in the treatment of febrile, nervous and chronic diseases.

A tried and efficient remedy in functional heart troubles.

Dose.—One or two Pillets three times a day.

Samples mailed to Physicians.

SENG

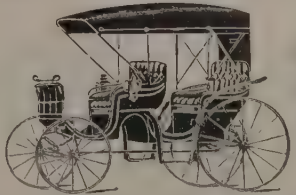
Stimulates the flow of the digestive fluids and encourages natural digestion; thus promoting assimilation and nutrition.

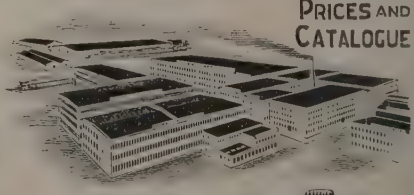
Dose.—A teaspoonful before meals, the dose before breakfast preferably in hot water.

Sample to Physicians who will pay express charges.

SULTAN DRUG CO. ST. LOUIS.

LARGEST AND MOST COMPLETE BUGGY FACTORY ON EARTH WRITE FOR PRICES AND CATALOGUE





OUR GOODS ARE THE BEST
OUR PRICE THE LOWEST

PARRY MFG. CO. Indianapolis, Ind.

The Profession has long needed a Reliable Aphrodisiac.

PIL ORIENTALIS (Thompson)

HAS STOOD THE TEST TEN YEARS.

Contains the Extract Ambrosia Orientalis, imported solely by ourselves, and is the green bark from the Tyunjahb plant of Siam and India, and the Gorrah or Yooimbee of the East Coast of Africa. New literature and medical testimonials will shortly be ready.

WHAT SOME PHYSICIANS SAY:

Dr. C. H. Harriman, Whitinsville, Mass., "I believe Pil Orientalis is the nearest to being a specific for Impotency of anything ever recommended."

Dr. W. H. Judson, Danielson, Conn., "Gave satisfaction in a case where everything else had failed."

Dr. G. W. Seaton, Clayton, Ind., "Relieved a case of Impotency of fourteen years' standing."

Dr. P. D. Peltier, Hartford, Conn., "Succeeded far beyond my expectations."

Dr. M. R. Latimer, Aquasca, Md., "Used on an old gentleman over seventy years of age for functional impotency, with decided benefit."

Dr. C. H. Latimer, Gov't Hospital for Insane, Washington, D. C., "My patient has been benefited by 'Pil Orientalis.'"

PRICE $1 PER BOX. $9.50 PER DOZEN.

Literature, Formula, etc., upon request.

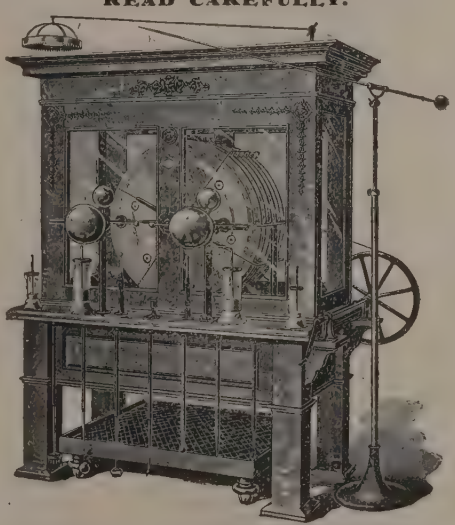
IMMUNE TABLET CO., WASHINGTON, D. C.

Agents—J. L. LYONS & CO., New Orleans; VON ANTWERP & CO. Mobile; MEYER BROS. DRUG CO., St. Louis; CARTER DRUG CO., Shreveport, La.

THE BIRTMAN, CHICAGO.

Something Entirely NEW.

READ CAREFULLY.



THE BIRTMAN, CHICAGO.

JUST OUT

OUR NEW 36 page pamphlet on Electro Theraphy has just been received from the press and is now ready for Distribution. . . . . .

WE LEAD, Others Follow

IN THE MANUFACTURE OF

Static Machines AND Electro Therapeutical APPARATUS.

FREE

to our Medical . . . Friends in any part of the . . . . .

WORLD.

It will pay you

to send us your address, that we may present you with one of these copies.

FACTORY and SALESROOM: C. F. BIRTMAN & CO., 35, 37, 39 Randolph Street, CHICAGO.

Tapestry Paintings

Special Designs for Special Rooms Furnished.

2000 Tapestry Paintings to Choose from. 38 Artists Employed, Including Gold Medalists from the Paris Salon.

Artistic Home Decoration. We can show you effects never before thought of, and at moderate prices, too. Write for Color Schemes, Designs, Estimates. Artists sent to all parts of the World to execute every sort of Decoration and Painting. We are educating the country in Color Harmony. We supply everything that goes to make up the interior of a home— . . . . . .

STAINED GLASS, RELIEF, CARPETS, FURNITURE, PARQUETRY, TILES, WINDOW SHADES, ART HANGINGS, DRAPERIES, ETC., ETC.

Russian Tapestry. For Wall Hangings in colorings to match all kinds of wood work, carpets and draperies. To be pasted on like wall paper, 52 inches wide. It costs little more than Burlaps, and has taken the place of Burlaps in private homes, being softer, smoother and more rich and restful. We recommend these most highly. We have made special silk draperies to match them. Send for samples.

Gobelin Art Gretons. For Wall Hangings. They are pasted on like wall paper. They are taking the place of the latter, being softer and more artistic, costing a very little more— about the same as wall paper ot $1.00 a roll. We have them in styles of Grecian, Russian, Venetian, Brazilian, Roman, Rococo, Dresden, Festoon College stripe, Marie Antoinette, Indian, Calcutta, Bombay, Delft, Soudan,—and, mark you, we have draperies to match. Send for samples.

Wall Papers. New styles, designed by gold medal artists. Send 50c. to prepay express on large sample books and drapery. Will include drapery samples in package. See our Antique. Metallic, French, Pressed Silks and Ilda effects. Have 500 different wall hangings with draperies specially made to match.

Draperies. We have draperies to match all kinds of wall hangings from 15c. a yard. This is a very important feature to attain the acme of artistic excellence in decoration. No matter how much or how little you want to spend, you must have harmony in form and color. Send for samples.

Free. If you will send us the floor plans of your house we will send you free a color scheme, illustrated by samples themselves. (Regular charge for this is $25.00 Tell us what you want on the walls of the principal rooms —tint, paper, paint or stuff. We can decorate your house from $100.00 up. If possible, send us the plans, rough pencil outline will do. Tell us if you want curtains, carpets, furniture—in fact, itemize to us everything you desire. If you have any or all of those articles let us know the color of them so we can bring them into the color scheme. Send 25c. to pay postage.

Douthitt's Manual of Art Decorations. The art book of the century. 200 royal quarto pages filled with full page colored illustrations of modern home interiors and studies. Price $2.00. If you want to keep up in decoration send $2.00 for this book, worth $50.00.

School. Six 3-hour tapestry painting lessons, in studio, $5.00. Complete written instructions by mail, $1 00. Tapestry paintings rented; full size drawings, paints, brushes, etc., supplied. Nowhere, Paris not excepted, are such advantages offered pupils. New catalogue of 175 studies, 25c. Send $1.00 for complete instructions in tapestry painting and compendium of studies.

Tapestry Materials. We manufacture Tapestry Materials for painting upon, superior to foreign goods and half the price. Book of samples, 10c. Send $1.50 for trial order, for two yards of 50-inch wide No. 6 goods, worth $3.00.

WHEN IN NEW YORK DO NOT FAIL TO VISIT OUR HOUSE.

JOHN F. DOUTHITT,

American Tapestry and Decorative Co.

222 FIFTH AVENUE,
NEAR 26th STREET.

NEW YORK.

PHILADELPHIA CHICAGO NEW YORK

COT-OR-AL

Is the latest, and we believe the BEST product of the research for a thoroughly EFFICIENT and SAFE fever and pain eliminator.

COT-OR-AL

Is distinctly an ELIMINATOR. It removes the cause. Strikes at the seat of disease.

The merely palliative action of the many so-called "coal tar derivatives" but induces habits of self-medicament. They touch the effect but not the cause.

COT-OR-AL

Safely and swiftly ELIMINATES the inherent cause in all forms of Neuralgia, Myalgia, Sciatica, Acute Rheumatism, Typhoid Fever, La Grippe, Asthma, etc.

A sample carton of Cot-or-al sent upon receipt of professional card.

VIN RES-TOR-AL

Is an absolutely pure Cocoa Wine manufactured under a new process which greatly strengthens the tonic properties and eliminates the harmful elements. No deleterious after-effects from its use. **PROMPT ACTION. NO REACTION.**

Indicated in all conditions requiring an efficient nerve, blood and muscle-building tonic.

Prescribe VIN RES-TOR-AL to-day for your most obstinate case of neurasthenia, or mental or physical debility, and note the immediate and permanent benefits. If your druggist is not supplied, large sample bottle will be sent upon receipt of thirty cents to prepay expressage.

The Agnew Pharmaceutical Co.,

INCORPORATED

Philadelphia, Penna., U. S. A.

A Few Illustrations From Our Orthopedic Bulletin.

Dear Doctor:

You send us the names and addresses of persons whom you know need any of the above apparatuses, and we will at once communicate with them, and have them call on you for measurement and treatment. The patient never knows who gave us the names and addresses. We simply notify them that you are employed by us.

Send for our BULLETIN. We manufacture our own goods and sell at wholesale prices. Over 4000 articles to select from. Write us to-day.

$300 Static Machines for $150,
and everything else half price.

FRANK S. BETZ & CO.,

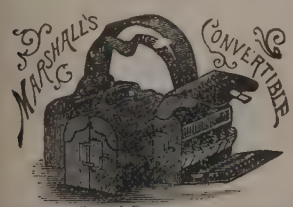
37 RANDOLPH ST.,

CHICAGO, ILL.

INDEX TO ADVERTISEMENTS.

		PAGE
Allison's Tables	W. D. Allison & Co.	XIV
Acneine Chemical Co		X
Anasarcin Tablets	Anasarcin Chemical Co.	V
Antiphlogistine	Denver Chemical Manufacturing Co.	V
Antikamia	Antikamia Chem. Co.	XII
American X-Ray Journal	Dr. Heber Robarts	XVII
Atlanta Retreat	Dr. C. C. Stockard.	XIII
Bartholdi Hotel	Milton Roble.	XIV
Bath Cabinets	Robinson Thermal Cabinet Co.	XIX
Bovinine	Bovinine Company	I
Buggies	Parry Mfg. Co.	XVI
Cot-or-al	The Agnew Pharmaceutical Co.	XIX
Chionia	Peacock Chemical Co.	VIII
Celerina	Rio Chemical Co.	VI
Cod Liver Oil	Scott & Bowne.	VII
College of Physicians and Surgeons		VIII
Cystogen	Cystogen Chem. Co.	II
Ergo-Apiol	Martin H Smith & Co.	2d CVR.
Emissine	St. L. Phar. Co.	XVI
Fellows Syrup Hypophosphates	Mr. Fellows	VII
Glyco-Heroin	Martin H. Smith Co.	VIII
Gray's Glycerin Tonic Compound	The Purdue Frederick Co.	VI
Hypotone	Hypotone Co.	V
Iron and Manganese Peptonate	H. A. Cassebeer	XV
Lamps	Rochester Lamp Co.	X
Maltine	The Maltine Co.	III
Medical Review of Reviews	Dr. Daniel Lewis	XVIII
Medical Books	Lea Bros. & Co.	IX
Nephro-Tone	Eldred Simpkins & Co.	VI
Orthopœdic Appliances	Frank S. Betz & Co.	XX
Portaits	Continental Art Co.	XXII
Pepto Mangan ("Gude")	M. J. Brietenbach Co.	IV
Peptogenic Milk Powder	Fairchild Bros. & Foster	4th CVR
Prepared Food	John Wyeth & Bro.	XXIII
Protargol	Farbenfabriken of Elberfeld Co.	XIX
Polk's Medical Register	R. L. Polk & Co., Publishers.	XV
Saddle Bags	Dr. W. S. Marshall	XXVI
Sanitarium—Atlanta Retreat	Dr. C. C. Stockard.	XIII
"	Dr. T. M. McIntosh	XIII
"	Drs. Elkin & Cooper	XIII
Seng	Sultan Drug Co.	XVI
Static Electric Appliances	R. V. Wagner & Co.	3d CVR
" " "	C. F. Birtman Co.	XVII
Splints	Pneumatic Splint Co.	XV
Sterate of Zinc	McKesson & Robbins	XVI
Tapestry Paintings	John F. Douthitt	XVIII
Tyree's Antiseptic Powder	J. S. Tyree, Chemist	II
Vitogen	The G. F. Harvey Co.	2d CVR
Whiskey	Simon N. Jones & Co.	VIII
Old Times Whiskey	Old Times Distilling Co.	XVII
Wheeler's Tissue Phosphates	T. B. Wheeler.	X

ONE ARTICLE IN TWO FORMS. Pat'd.



Automatic Clasps.

Perfection Attained.

Best in the World.

Outlasts All Others.

Write for prices nd illustrations of ll Best Styles of ases and Bags to

BUGGY-CASE-SADDLE-BAGS

W. SCOTT MARSHALL, Sole Proprietor of All Convertables.

Office, 5625 Jackson Avenue,

CHICAGO, - - - - - - ILL.

Reprints from the Georgia Journal of Medicine and Surgery will be furnished at following rates:

100 Copies, 4 pages	$2 00
Each additional hundred copies	40
100 Copies, 6 pages	3 00
Each additional hundred copies	50
100 Copies, 8 pages	3 25
Each additional hundred copies	60
100 Copies, 10 pages	4 00
Each additional hundred copies	70

COVERS, $1 00 to $1 50 extra per cover and $1 00 for each additionol hundred.

TABLE OF CONTENTS.

ORIGINAL COMMUNICATIONS.

Acromegalia—By T. L. Cornwell, M.D., S. C. 53
Otorrhœa—"A Rising in the Head"—By Wm. Lewis Bullard, M.D., Columbus.. 56
Subarachnoid Spinal Cocainization as a Means of Inducing Surgical Anæsthesia—By Edward N. Leill, M.D., Jacksonville, 58
Compound Fracture of Lower Jaw, with Report of Case—By P. R. Cortelyou, M D., Marietta 63
Quinine Sulphate as an Ecbolic—By O. B. Bush, M.D., Colquitt..... 64
The Autobiography of a Malarial Germ—By Theodore Waters 66
An Unusual, and Probably Unique, Complication (General Emphysema) of Tracheotomy—By E. C. Ellett, M.D., Memphis 72

EDITORIAL.

Acromegalia..... 74
Some Objectionable Head-Lines 75

EDITOR'S TABLE.

The Tri-State Medical Society..... 76
University College of Medicine 76
New Orleans Polyclinic 76
Dual Consciousness..... 77
Silver Nitrate Injections in Phthisis Pulmonalis..... 77
God and the Doctor..... 78
For Sale—Post-Graduate Tickets..... 78
Advertisers..... 78

NEW BOOKS.

A Handbook of Materia Medica, Pharmacy and Therapeutics—By Samuel O. L. Potter, M.A., M.D..... 79
International Clinics—By Henry W. Cattell, M.D..... 80
Medical Diseases of Infancy and Childhood—By Dawson Williams, M.D..... 81
Attainment of Womanly Beauty—By Albert Turner 81
Inductive Coils—By H. S. Norris..... 82
Webster's International Dictionary—By Noah Porter, D.D., L.L.D... 82

PROGRESS OF MEDICAL SCIENCE.

Therapeutics—

Sugar-free Milk as a Food for Diabetes..... 83
A Simple Electric Light and Heat Bath..... 83
Toxicity of Acetanilid..... 84
Digitalis in the Treatment of Heart Disease 85
Quinine as an Oxytocic..... 85

Internal Medicine and Neurology—

Clinical Quantitative Analysis of Proteids in Stomach Contents 87
Motor Insufficiency of the Stomach and its Management 97
Enteric Fever, on Immunity after.. 88
The Tuberculin Test..... 89
Total Tuberculosis of Both Suprarenal Capsules, Without Addison's Disease..... 90

General Orthopœdiac and Genito Urinary Surgery—

Cancer of Rectum, High-Seated, an Improved Method of Treating 91
Present Status of the Carcinoma Question... 91
Umbilical Hernia, Radical Operation for the Cure of..... 92
Artificial Production of Connective Tissue by Means of Injections of Ajar Ajar..... 92
Erysipelas, A New Local Treatment for..... 93
Chancroid, Etiology of..... 93

Obstetrics and Gynœcology—

Laceration of the Cervix to be Considered, Usually, More of a Normal than a Pathological Condition 94
Round Ligament Suspension of the Uterus. 94
Pregnancy, Following Ventral Fixation, Accidents Relating to..... 95
Myomectomy of Nine Myomas during Pregnancy; Delivery at Term..... 95
Treatment of Pruritus Vulvæ..... 96
Relation of Ovarian Disease to Insanity, and Treatment..... 96

University College of Medicine

RICHMOND, VIRGINIA,

MEDICINE — DENTISTRY — PHARMACY.

FIRST-CLASS IN STANDARD, SCHOLASTIC REQUIREMENTS AND CLINICAL FACILITIES.

CATALOGUE—100 PAGES—ON APPLICATION.

MEDICAL DEPARTMENT

OF THE

Tulane University of Louisiana.

Formerly { 1834-1847 Medical College of Louisiana.
1847-1884 The Medical Department of the University of Louisiana.

Founded in 1834, this is the oldest Medical College in the Southwest and has 3841 graduates and at the last session, 414 students.

The next session, the sixty-eighth, will begin October 31st, 1901, and will close April 30th, 1902.

The corps of teachers—Professors, Lecturers, Instructors, Demonstrators and Chiefs of Clinic, number forty.

Since October, 1893, the College has occupied a very large and commodious new building, which provides all of the many requisites for modern medical education, including especially ample and well equipped Laboratories for Chemistry; for Pharmacy; for Practical Anatomy; for Microscopical Anatomy, Pathology and Bacteriology, and working rooms for Practical Physiology, and for Gross Pathological Anatomy. These admirable Laboratories, now added to the unrivalled practical advantages for Clinical, Anatomical and Pathological studies given by the great Charity Hospital, will enable the Medical Department now to provide its students with unsurpassed advantages for their medical education.

Special attention is called to the superior opportunites given for

CLINICAL INSTRUCTION.

The Professors of the Medical Department are given, by law, the use of the great Charity Hospital as a school of practical instruction, and Medical students are admitted without payment of any hospital fees. The Charity Hospital contains nine hundred beds, the number of indoor patients annually admitted is about ten thousand and the number of visiting or outdoor patients exceeds twenty thousand. Its advantages for practical study, and especially of the diseases of the Southwest and of the negro race, are unequalled by any similar institution in this country. The Medical, Surgical and Obstetrical Wards are visited daily by the respective professors and instructors, and all students are expected to attend and to familiarize themselves *at the bedside of the patients*, with the diagnosis and treatment of all forms of diseases and injuries. The facilities for *genuine* clinical teaching are unsurpassed by those of any Medical College in the United States. An annex for children, containing two hundred beds, has recently been added.

All students who matriculated for their first full course prior to January 1st, 1899, will be required to attend at least three annual sessions prior to graduation, and will be charged as follows: for the 2d year, $150; for the 3d year (including the graduation fee) $165.

All fees, except the graduation fee of $30, are payable in advance. These fees are as low as are compatible with the *superior advantages given.*

The above fees apply only to students who took their first full course prior to January 1st, 1899. From all other students this College will, in common with all reputable Medical Schools of the United States, require a four-year course for graduation. The fees of the first and second year of the four-year course will amount to a total of $135 for each year. The total of the fees for the four courses will amount to about $580. Four-year students are subject to the educational requirements of the Southern Medical College Association, as specified in the annual catalogue.

Students and Graduates may select such special branches or partial courses as each may desire.

Graduates and Students of this College, who have paid for all courses required, can continue to attend without payment of the professors' fees.

Graduates of other reputable Medical Colleges are charged only $70 for the professors' tickets, and are thereafter given the same privileges granted to graduates of this College.

The total fees for the two courses required in Pharmacy amount to $155, or about $75 annually.

For further information and catalogue, address

Prof. S. E. CHAILLÉ, M. D., Dean,

P. O. Drawer 261. **NEW ORLEANS, LA.**

WYETH'S

PREPARED FOOD

—OF—

Malt, Milk and Cereals

—FOR—

INFANTS AND INVALIDS

A Food designed to meet the conditions which these two phases of life present must be chemically and physiologically adapted; the nutritive elements must be fixed and concentrated; the assimilable properties must be so adjusted that there may be a quick absorption and appropriation, and there must be no excess of substance to tax the power of digestion.

The constituents of this Food have been so proportioned that in preparing it for use it may be adjusted to suit all ages and conditions.

It is Wholesome, Nourishing, Economical

The superior of mother's milk; a combination affording the physician every advantage and embodying the established principles of infant feeding and hygiene.

Its diastasic properties prevent curdling, correct the ills of malnutrition and tone the weak and wasted organs of digestion.

Wyeth's Prepared Food is not a predigested Food, but one that when prepared for use immediately exerts upon itself that power of digestion which has been carefully preserved in its constituents—the Malt, rich in diastase, acting in conjunction with the pancreatic secretions, digests the fats and albuminoids of the milk, converting the starch of the cereals into sugar (Maltose) and neutralizing the tendency of the acids of the stomach to form curds; thus rendering the Food of infinite value to the infant and invalid alike, supplying the necessary nutrition and material to strengthen and build up the human economy, at the same time relieving the stomach of the infant or invalid from that expenditure of energy necessary to the digestion of ordinary food.

Its digestive properties may be shown by simple test, the progress of conversion being readily noticeable.

PUT UP IN 8-oz., 1-lb. AND 6-lb. GLASS CONTAINERS

JOHN WYETH & BROTHER

INCORPORATED

WRITE FOR SAMPLES AND LITERATURE

PHILADELPHIA, PENNA.

SANMETTO IN SPASMS OF BLADDER NECK.

Sanmetto is not new to me, as I have used it two years. I will report a case that came under my treatment on the fourth day of February. A lady about 40 years of age had spasms of the neck of the bladder. She was in constant pain. She could neither sleep nor sit still. She was compelled to urinate as often as every half hour. I commenced giving her Sanmetto, a teaspoonful every two hours for the first twelve hours. The next twenty-four hours I gave her a teaspoonful every three hours, and the next twenty-four hours every four hours, unless sleeping. Discharged the woman the fifth day as well, and she has been well ever since. A prominent physician of our city had been treating this patient, but she received no benefit from his treatment whatever. WM. S. MCLEAN, M.D.

Saginaw, E. S., Mich.

PIL ORIENTALIS.

It is with confidence in the merit of their product, also in view of the eminent satisfaction Pil Orientalis (Thompson) has given among physicians using it in their practice, that The Immune Tablet Co. adopted the unusual course, at great expense, of sending out complimentary boxes, so physicians may prove the exceptional merit, aphrodisiac effects, and general tonic value before prescribing it to their patients, and they can rely upon obtaining only the best of possible results.

Pil Orientalis (Thompson) is put up in three strengths—No. 1, No. 2 and No. 3 extra strong—and it is always advisable in obstinate or "depraved" cases to put the patient on a full month's course of No. 1, rather than attempt to bring the sexual organs into sudden activity.

The Extract Ambrosia Orientalis is imported solely by The Immune Tablet Company and is the green bark from the Tyunjahb plant of Siam or India, and the Gorrah or Yooimbee of the East Coast of Africa. New literature and medical testimonials will shortly be ready.

After a fair exhibition of Pil Orientalis (Thompson) The Immune Tablet Company would be pleased to receive any comments, particularly if unfavorable, as they may be able to give some suggestions to meet many of the complications in this distressing class of disease.

Eucalyptus has received praise because it has physiological action of that character which should render it remedial of intermittent fever.

But, the evidence as to its utility is contradictory. The consensus of opinion, however, is to the effect that careful experience and observations go to show that the ordinary preparations of eucalyptus met with in the market are inferior to the salts of cinchona; they can never take the place of quinine in arresting the paroxysms, in circumventing relapse in the septenary periods, and in securing general antipaludal effect.

But, while the common preparations of eucalyptus are inferior to quinine, there is one preparation that is superior. We refer, of course, and of necessity, to Sander's Eucalyptol, the one preparation of eucalyptus that has gained and maintained favor. It redeems the name of eucalyptus from ignomy, and possesses the most pronounced antiperiodic qualities—qualities that quinine has not infrequently abused and ill-used. It is not only of very meritorious service in the convalescence from both intermittents and remittents, and of great utility in chronic malarial poisoning, but it does that which quinine fails to do—it reconstructs the damages to the organs of assimilation caused by malarial infection. Thus, incontrovertibly, it is superior to quinine in treating the intermittents.

It is most conveniently given in alcoholic solution: 2 drachms of Eucalyptol to 1 ounce of alcohol, 10 to 20 drop doses in a tablespoonful of milk four times daily.

In prescribing the preparation we should always write it,

℞ Sander's Eucalyptol,

or get it in the original package from Meyer Bros. Drug Co., St. Louis, Mo., and thus, by employing the one preparation acknowledged to have antiperiodic effects, assure ourselves of prompt therapeutic results.

NEW EDITION
Webster's International Dictionary
NEW PLATES THROUGHOUT
25,000 New Words
Phrases and Definitions
Prepared under the direct supervision of W. T. HARRIS, Ph.D., LL.D., United States Commissioner of Education, assisted by a large corps of competent specialists and editors.
5000 Illustrations. Rich Bindings. 2364 Pages.
The Best Practical English Dictionary Extant.
We also publish
Webster's Collegiate Dictionary
with Glossary of Scottish Words and Phrases.
"First class in quality, second class in size."
NICHOLAS MURRAY BUTLER.
Specimen pages, etc., of both books sent on application.
G. & C. MERRIAM CO., Publishers, Springfield, Mass.
WEBSTER'S INTERNATIONAL DICTIONARY

NO SHORTENING FROM FRACTURES

A. L. CORY, M. D.,
CHICAGO SURGEON L. S. & M. S. R. R.,
4101 STATE STREET.
TELEPHONE OAK 139. CHICAGO, June 27, 1901.

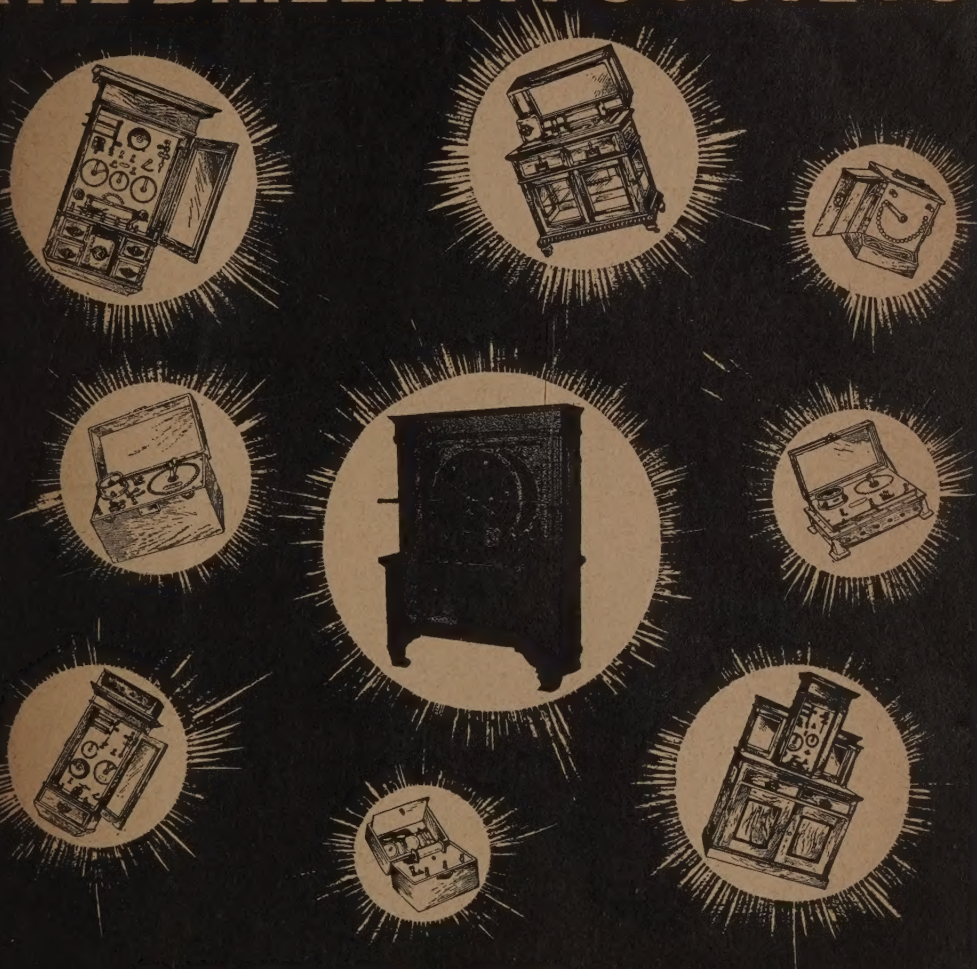
"GENTLEMEN:
"To-day I took the Pneumatic Splint from Adolph Johnson's thigh, which I put "on May 19th. He has been walking about with it for some time. When the splint "was removed measurements showed the injured leg exactly the same length as the "other. I am sure that it is the ideal way of treating fractured Femurs. Everyone "in the Hospital expresses the opinion that it is the only way to treat fractures."

USED ONLY 38 DAYS

Every Surgeon ought to have one. Price to Doctors, $35. To patients, $50. Write to-day to

AMBULATORY PNEUMATIC SPLINT MFG. CO., 183½ Lake St., Chicago.

THE BRILLIANT SUCCESS



OF THE **MICA PLATE** STATIC MACHINE

CANNOT ECLIPSE THAT OF OUR OTHER INSTRUMENTS AS A STANDARD OF RELIABILITY. EFFICIENCY AND WORKMANSHIP.

OUR CATALOG IS FULL OF INFORMATION.

R.V. WAGNER & CO.

308 DEARBORN ST., CHICAGO.

DIAZYME, Essence

supplies in a very agreeable and active form, the peculiar ferment of the animal digestive secretion, upon which depends the conversion of farinaceous foods into soluble and assimilable form.

DIAZYME

exceeds in starch digesting power any preparation hitherto offered.

DIAZYME

presents the natural amylolytic enzyme; converts farinaceous substance into achroo-dextrins and maltoses—the peculiar derivatives of animal digestion.

DIAZYME

exhibited with the food, replaces faulty salivary digestion—finds favorable conditions for its activity in the first half-hour of digestion.

DIAZYME

exhibited following the ordinary period of gastric action, accomplishes the digestion of starch in the intestinal tract—replaces deficient pancreatic secretion.

DIAZYME

is highly agreeable, aromatic and stomachic, and is absolutely free from cane sugar.

Originated and Made by

FAIRCHILD BROS. & FOSTER

New York